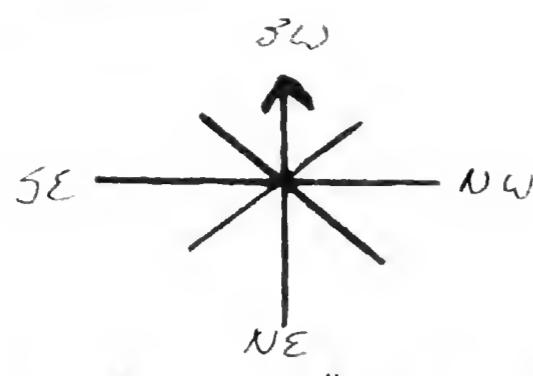


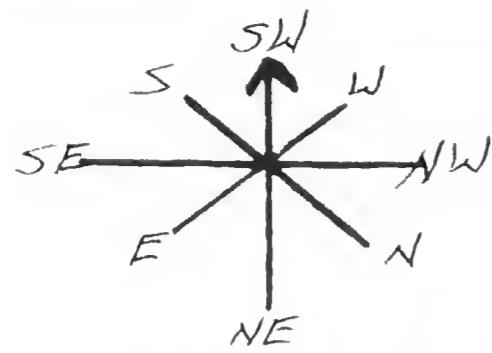
DATE 4 SEPT 64
Pg. # 1

time	species	#	dir.	hgt.	remarks	loc.
1020	BROWN Booby	2	NE	25-30'	1-mm, 1 ad.	
1000	—	—	—	—	—	
1000	Noddy Comm.	3	SE	low	— COMMENCE AT SEA OBSERVATIONS	
1000	WEDGE-TAIL	1	SE	low	(DATA COLLECTION BY SHIP)	
1000	COMM. Noddy	1	SW	low		
1030	WEDGE-TAIL	24	SE	"		
1030	HAWAIIAN Noddy	1	"	"		
1030	COMMON Noddy	3	"	"		
1042	WEDGE-TAIL	1	SW	"	Wedge-tails have pterodroma-like flight today)	
1044	"	1	SE	"	(How about that?)	
1102	"	1	NW	"		
1111	"	1	NW	"		
1112	"	1	SE	"		
1114	"	1	SE	"		
1115	"	1	"	"		
1122	Common Noddy	2	ENE	"		
1125	Wedge-tail sh	1	NW	low		
1130	Wedge-tail	1	SE	low		
1140	"	1	SE	low		
1141	"	2	NW	"		
1141	Common Noddy	1	NE	"		
1145	WEDGE-TAIL	1	NW	"		
1146	"	1	SE	"		
1224	"	1	SW	to 30'	No flapping	
1234	"	1	SW	low		
1235	"	2	SW	"		
1242	"	1	W	low		
1245	"	1	S	"		
1250	"	2	NW	"		
1250	"	2	NW	"		
1251	"	1	NE	"		
1254	W.T. Tropic	1	SE	to 40'	got up from water	
1256	Wedge-tail	1	NE	low		
1256	"	1	SE	"		



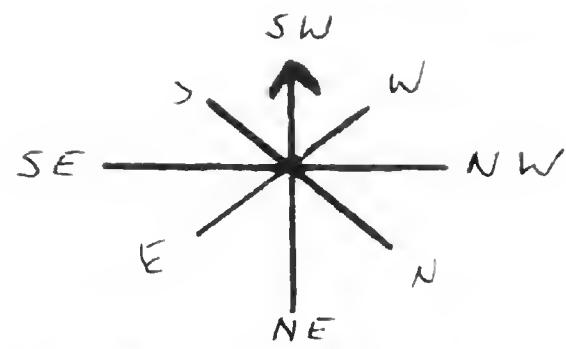
DATE 4 Sept 1964
Pg. # 2

time	species	#	dir.	hgt.	remarks	loc.
3-5 28-614	Common Noddy	2	N	low		
1300	wedgetail	1	N	"		
1309	Common Noddy	2	N	"		
F 1310	wedgetail	15	②	"		
1314	"	1	S	to 30'		
1318	"	1	S	low		
1322	"	1	N	"		
1322	Newell's	1	N	"		
1324	wedgetail	1	NE	"		
1331	"	1	N	"		
1332	"	1	N	"		
1337	"	1	N	"		
1339	"	1	N	"		
1346	R.F. Boob V	1	N	"		
1349	wedgetail	2	N	"		
1353	"	1	N	"		
1403	"	1	S	to 70'		
1408	Newells	1	N	low		
F 1410	wedgetail	600±100			Densest flock ever seen - birds literally obscured the water in <u>feeding</u> concentration. Entire mass would rise slightly, then settle on water all together briefly. KA	
1420	Newell's Sh	1	NW	8-20'		
1423	wedgetail sh.	1	N	low		
1431	"	1	NW	low		
1432	wedgetail	2	ENE	low		
1440	Com. Noddy	1	NNW	low		
1443	wedgetail	1	NNE	low		
1450	"	1	N	low		
1452	wedgetail	1	NE	low		
1503	wedgetail	2	NE	low		
1510	White-tail Tropic	1	SE	80'		
1514	wedge tail sh.	1	N	low		
1523	"	1	NE	low		
H 1534	Sooty TERN	1	S	1-2'		
1535	wedge tail sh.	1	NNE	low		
1536	wedgetail	1	NE	low		
1548	Newell's Sh	1	N	low		
1607	WEDGETAIL	1	NW	low		
1610	"	1	SE	"		
1613	"	1	NE	"		



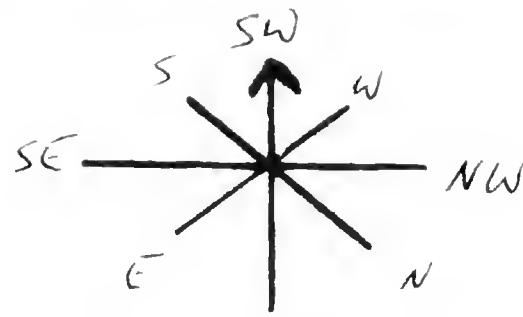
DATE 4 SEPT 64
Pg. # 3

time	species	#	dir.	hgt.	remarks	loc.
1630	COMMON NODDY	1	SE	low		
1631	WHITE-T. TROPIC	1	E	80'		
1635	WEDGETAIL	1	NW	"		
1642	RED-T. TROPIC	1	E	150'		
1651	WEDGETAIL	1	E	low		
1653	NEWELL'S	1	NW	low		
1654	WEDGETAIL	2	SE	low		
1654	NEWELL'S	1	NW	low		
1657	WEDGETAIL	2	SE	low		
1709	Newell's	1	N	"		
1709	Wedgetail	1	N	"		
1714	NEWELL'S	1	N	"		
1720	Wedgetail	1	NW	"		
1727	NEWELL'S	1	NE	"		
1728	Wedgetail	1	NW	"		
1734	"	1	NW	"		
1734	Shear-Pet	1	NE	"		
1734	Bird	1	NE	"		
1735	Newell's	1	N	"		
1741	"	1	NE	"		
1744	"	1	NW	"		
1746	"	2	NW	"		
1747	Wedgetail	1	NW	"		
1749	Newell's	1	N	"		
1752	Wedgetail	1	N	"		
1759	Newell's	1	SE	"		
1811	Wedgetail	1	N	"		
1814	"	1	SE	"		
1817	Shear-Pet	1	NW	"		
1821	Wedgetail	1	NE	"		
1841	"	1	NE	"		
1843	"	1	NE	"		
1852	Red-T. Tropic	1	U	60	1mm	
1853					end observations	
1855	Red-T. Tropic	1	S	70'		



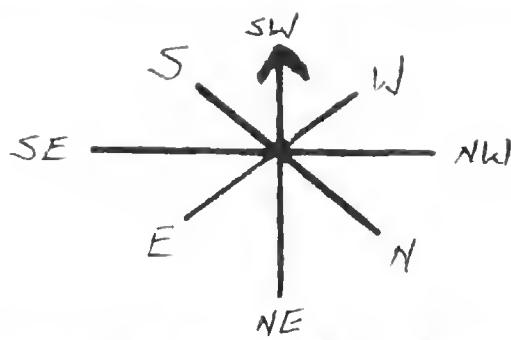
DATE 5 SEPT 64
Pg. # 1

time	species	#	dir.	hgt.	remarks	loc.
SUNRISE	0530X	—			—	
7-10	0544	Sooty(?) Shear	1	S	to 20'	Appeared all dark, Newells shape but larger, slower, less regular flapping
16-35	0551	Wedgetail	1	NE	low	
3-3	0558	Wedgetail	1	NE	"	
6-7	0600	Bulwers	1	SE	"	
1-1	0600	Shear-Pet	1	SE	"	
1-1	0600	Shear-Pet	1	SE	"	
2-4	0600	Newells(?)	1	NW	"	
2-4	0615	Sooty Tern	2	NNW	"	
2-5	0621	Wedgetail	1	NE	"	
2-5	0630	Shear-Pet	1	SW	"	Wedgetail or Bulwers - distant
2-5	0632	Frigate	1	Ø	25'	
2-5	0638	Wedgetail	1	NE	low	
2-5	0644	Wedgetail	1	NW	"	
2-5	0649	Sooty Shear	1	SE	to 40'	
2-5	0651	Wedgetail	1	SW	low	
2-5	0657	Wedgetail	1	NNW	"	
2-5F	0700	Shear-Pet	1	SE	"	distant
2-5F	0705	R.F. Booby	1			
		Sooty Tern	2	Ø NW	low	Not feeding - flat
		Wedgetail	5±1			F-1-8
	0714	Bulwers	1	NE	low	
	0733	Sooty Shear	1	SE	to 30'	
	0733	Sooty Shear	1	SE	to 20'	
	0735	Sooty Shear	2	SE	to 20'	
	0744	" "	3	SE	to 30'	
	0744	Wedgetail	1	SE	low	
	0750	"	1	SW	"	
	0750	Bulwers	1	NW	"	
	0753	Shear Pet	2	NW	"	
	0756	Wedgetail	3	NW	"	
	0757	R.F. Booby	1	NW	"	Int adult?
	0757	Sooty Shear	1	SE	to 40'	
	0800	Wedgetail	1±1	NW	low	got up from water
	0809	"	3	SW	"	
	0810	"	1	NW	"	
	0813	"	2			joined above 3 following ship.
	0821	Shear Pet	1	NW	low	
	0822	Frigate	1	SE	100'	
	0824	R-T Tropic	1	E	50'	
	0828	Wedgetail	1	SE	low	



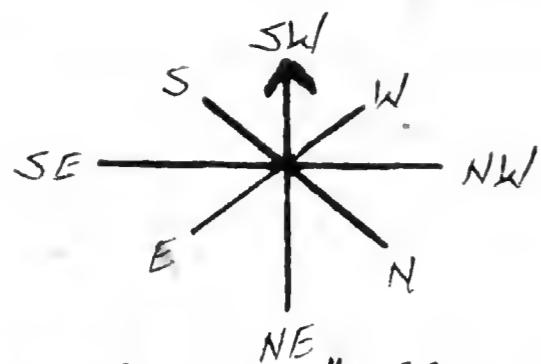
DATE 5 Sept 64
Pg. # 2

time	species	#	dir.	hgt.	remarks	loc.
21-23	0830 Sooty shear	1	SE	0-15'		
	6831 "	1	SE	"		
	0832 "	2	SE	"		
	0834 "	1	SE	0-10'		
24	0834 R.T. Tropic	1	W?	50'	circling ship - dove nearly straight into water, stayed on surface 5 sec., took off E.	
	0843 Sooty shear	1	SE	0-15'		
25	0845 Shear Pet	1	SSE	0-15'	Presaging sooty shear	
	0851 Sooty shear	1	SSE	0-10'		
	0858 "	2	SSE	0-15'		
	0859 "	1	SSE	0-15'		
	0900 Shear Pet	1	SSE	low	probably wedge-tail	
26	0906 Sooty shear	1	SE	0-8'		
	0908 Wedgetail	1	NNW	low		
	0914 "	1	NE	"		
	0917 Sooty shear	1	SSE	"		
	0926 "	1	SSE	0-19'		
27	0927 Frigate	1	E	90'		
	0945 Sooty shear(?)	1	SSE	low		
	0949 Sooty shear	1	SSE	0-20'		
	0953 Wedgetail	1	NNW	low		
	0957 "	1	NNW	low		
	0958 Sooty shear	1	SSE	0-10		
	1000 "	1	"	0-8		
	1003 WEDGE TAIL	1	SW	low		
	1005 SOOTY SHEAR	1	SE	low		
	1008 " "	1	S	"		
	1008 " "	1	S	"		
	1012 R.T. - Tropic	1	S	80'		
	1013 WEDGE TAIL	1	N	low		
	1016 SOOTY SHEAR	1	S	3-20"		
	1020 Wedgetail	1	SE	low		
	1021 "	1	"	"		
	1024 SOOTY SHEAR	1	S	"	DARK PHASE	
	1030 " "	1	S	"		
28	1035 NEWELL'S	1	CA	"	- Collected	
	1050 BULWERS Pet	1	NE	"		
	1051 WEDGE TAIL	1	NE	"		



DATE 5 SEPT 61
Pg. # 3

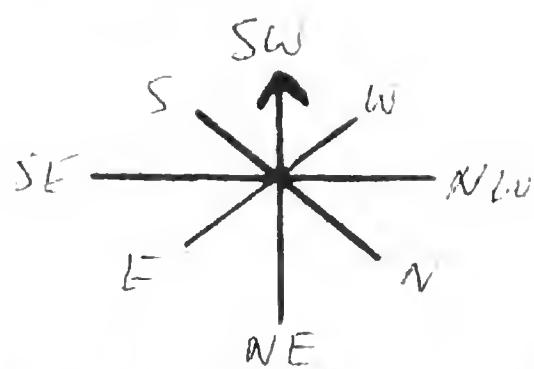
time	species	#	dir.	hgt.	remarks	loc.
2-2	1055	1	NE	low	DISTANT	
4-47	1111	1	NE	"		
	"	1	NE	"		
7-9	1120	1	SE	"		
	1121	1	NE	"		
2-13	1135	3	E			
3-3	1135	1	SE	low		
	1150	2	SE	low		
5-5	1150	1	N	low		
	1157	1	SE	low		
2-27	1200	2			NOT SEEN TO FEED	
	Bulwers	1	(○)			
	FAIRY TERN	1				
	HE -					
	RED-ft. Booby	1				
	Hoody, Com.	11			5. Adult	
	1210	1	SE	low		
	1222	1	SE	low		
	1227	1	NE	low		
	1235	1	SE	low		
F	1300	10				
	Shear-Pet	1				
	Wedgetail	1				
	Wedgetail	1				
	1305	1				
	Sooty Shear	1				
	1300	10				
	Wedgetail	26	Q	low	No fish seen - not seen to feed.	
	Bulwers	1				
	1309	1			on water	
	1322	2	SE	low		
	1326	2	SE	low		
	1327	1	SW	low		
F	1340	8	(○)	low	- appear. to be molting primaries.	
	Wedgetail	1	NNE	100'		
	1359	1			- 2 collected not feeding	
	Frigate ♂	1				
	1402	1	SSE	0-10		
	1414	1	SE	low		
	1430	1	SE	low		
	1435	1	SE	low		
	1451	1	SE	low		
	1454	1	SE	low		
	1454	1	E	low		
	1500	1	NW	"		
	1514	1		"		
	1515	1	(X)	"		
	1519	1	(X)	"		
	Sooty SHEAR	1	S	"		
L-1	1530	1	SE	"	Imm.	
	MASKED Booby	1				



DATE 5 SEPT 64
Pg. # 4

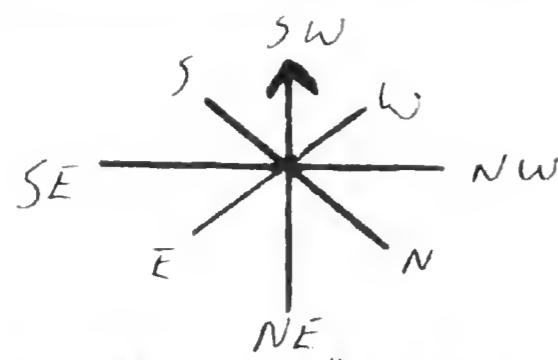
~~Rise~~ Sun set
0529 1803

time	species	#	dir.	hgt.	remarks	loc.
1534	WEDGE-TAIL	2	SE	low		
1551	"	2	"	"		
1555	"	1	NW	"		
1557	"	1	—	—	collected	
1603	"	1	W	low		
1613	Shearwater-Petrel	1	SE	High Low		
1622	Wedge-tail sh.	2	NW	Low		
1627	Bulwer's Petrel	1	SE	low		
1630	Bonin Is.	1	E	low		
1634	Sooty? Shearwater	1	FNE	Low S.		
1638	Shearwater-Petrel	1	SW	Low		
1654	" "	1	S E	Low		
1655	Bulwer's Petrel	1	SE	low	sitting on water	
1700	WEDGE-TAIL	1	SE	low		
1707	"	4	SE	"	not feeding - flying fish nearby - Two Wedgetails	
	Sooty TERN	6	SE	low	Arose from water.	
	Bulwers	1	"	"		
	FRIGATES	2	"	"		
	FAIRY TERN	1	"	"		
1713	WEDGE-TAIL	1	E	low		
1713	Bulwers	1	NE	"		
1715	SOOTY SHEAR	3	SSE	To 30'		
1724	Bulwers	1	SE	low		
1728	SOOTY SHEAR	1	SE	"		
1733	Wedge-tail sh.	1	SE	low		
1745	Sooty Shearwater	1	SE	low		
1752	Wedge-tail	1	SE	"		
1803					SUNSET APPARENT.	



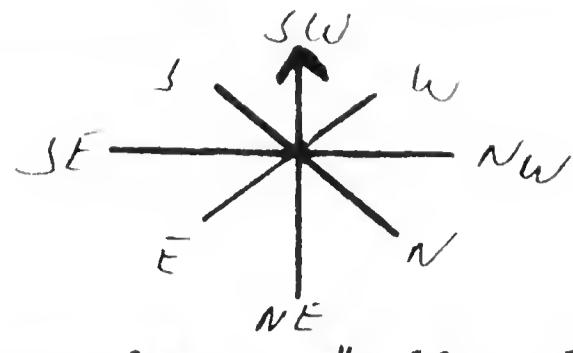
DATE 6 SEPT 64
Pg. # 1

time	species	#	dir.	hgt.	remarks	loc.
0536	Wedgetail	1	E	low		
0546	-	-			sunrise	
6553	Bulwers	1	ENE	low		
0554	Shear-Pet	1	ENE	"		
0612	Bulwers	1	SW	"		
0619	Shear-Pet	1	E	"		
0633	Newell's Sh	1	N	low		
0645	Shear-Pet	1	SE	low		
0700	Wa-necked Pet	1	NE	To 25'		
0704	Wedgetail	1	SE	low		
0705	Wa-necked Pet	1	ENE	low		
0725	Wedgetail	1	NE	"		
0736	Golden Plover	1	SW	40'	calling	
0746	Golden Plover	1	SW	50'	calling	
0751	Bulwers	1	S	low		
0836	BULWERS	1	WSW	low	--	
0846	SOOTY TERN	1	ENE	30'		
0848	" "	3	SE	30'		
0848	SHOREBIRD	1	--	--	SEEN VERY DISTANT. UNIDENTIFIABLE	
0851	BULWERS	1	SE	low		
0906	WEDGETAIL	1	NE	"		
0911	"	1	E	"		
0914	SOOTY TERN	3	SE	"		
0915	--	1	--	--	BARGE + TOW ON STARBOARD HORIZON @ 1 o'clock	
0930	WEDGETAIL	1	E	low		
0934	Bulwers	1	SE	low		
0934	Shear-pet	2	SE	low		
F 0950	SOOTY TERN	28				
	WEDGETAIL	12 ± 2			FEEDING ON SMALL Flying fish.	
	WHITE-N. PETREL	1				
	POMERINE JAGER	1				
					LIGHT PHASE	
1020	Tropicbird	1	NW	30'	distant	
1100	Bulwers	1	NE	low		
1105	Bulwers	1	NW	"		
1116	Wedgetail	1	NE	"		
1221	"	1	"	"		
1231	SOOTY TERN	1	SE	-		
1234	R.-F. Booby	1	SW	low	Ad.	



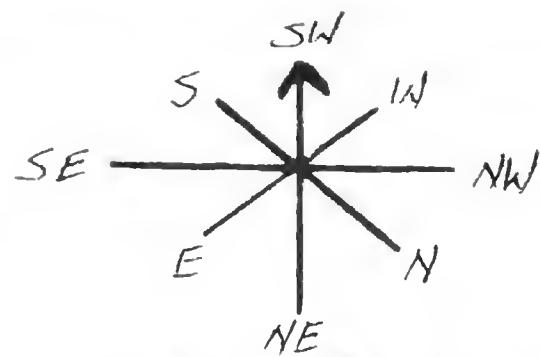
DATE 6 Sept 1964
Pg. # 312

time	species	#	dir.	hgt.	remarks	loc.
1732	WedgeTail	1	NE	low		
1749	R-T Tropic	1	Ø	OH ₂ O	collected P Woodward	
1755	R-F Booby	1	W	low		
1356	WedgeTail	4	NE	low		
1356	Sooty Tern	1	NE	40'	7 Remnants of Flock is perhaps or start of one	
1415	Bulwer's	3	S	low	Traveling Together.	
1428	Bulwer's	1	SW	low		
1458	Bonin(?)	1	SE	low		
1515	Sooty Tern	3	SE	40'		
1519	Bulwer's	1	SW	low		
1608	WedgeTail	1	S	low		
1615	WedgeTail	1	ESE	low		
1617	WedgeTail	1	ENE	low		
F 1622	Bulwer's	3	Ø	low		
WT	Pterodroma	1	Ø	low	Not feeding.	
1623	WedgeTail	2	NE	low		
1623	WedgeTail	1	NE	low		
1630	WedgeTail	1	NE	low		
1633	(BoninIs) Petrel	1	SW	low		
1634	Sooty Tern	4	NW	50'		
F 1645	Sooty Tern	30-5		low	Feeding. Fish jumping out of water.	
	WedgeTail	8	Ø	low		
WT	Gr Frigate	1	Ø	100'		
F 1646	Sooty Tern	13	E	50'		
F 1646	Sooty Tern	10	E	low	Going to above flock.	
WT	Gr Frigate	1	Ø	75'		
WT	Kermadeuc Pet	1	E	low	Partly phase, PWW	
F 1648	Sooty Tern	11	E	50'		
WT	Sooty Shear	1	SSW	low	flying towards 1645 flock	
F 1656	Sooty Tern	8	ENE	low		
1701	WedgeTail	1	ENE	low	flying towards 1645 flock.	
1710	Sooty Tern	2	E	low		
1710	Sooty Tern	2	E	low		
1710	WedgeTail	2	E	low		
1710	WedgeTail	2	E	low		
1723	WedgeTail	1	NE	low		
1731	WedgeTail	1	E	low		
1749	WedgeTail	1	NE	low		
1751	WedgeTail	2	SE	low		
1752	WedgeTail	2	NE	low		



DATE 6 Sept 1964
Pg. # 3

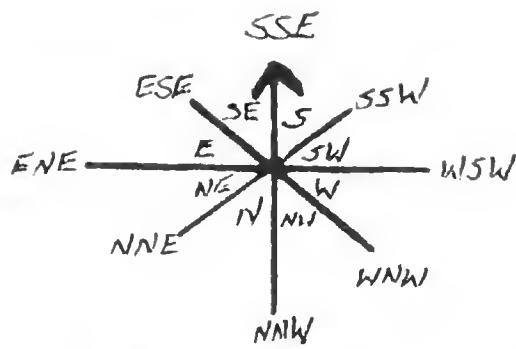
time	species	#	dir.	hgt.	remarks	loc.
22	1800	Sooty Shear	1	SE	low	
22	1802	Bulwer's Petrel	1	ENE	low	
33	1806	Wedgetail	1	NE	low	
	1818	Wedgetail	1	ENE	low	
	1822	Wedgetail	1	NE	low	
	1822	Sooty Shear	1	SE	low	not arching high. flying straight. alternate flapping gliding.
	1823				Sun appears to be down	



OUT OF GRID

DATE 7 SEPT 64
Pg. # 1

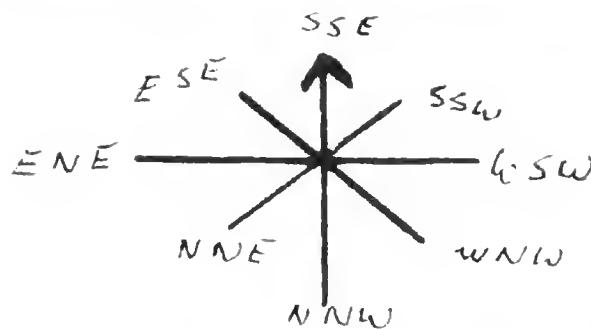
time	species	#	dir.	hgt.	remarks	loc.
0600	WEDGETAIL	4	NW	LOW		
0601	SOOTY TERN	2	NW	50'		
0604	WEDGETAIL	3	NE	LOW		
0604	--	--	--	--	SUNRISE	
0606	WEDGETAIL	1	S	LOW		
0608	"	1	NE	"		
0612	SOOTY TERN	3	N	"		
0613	WEDGETAIL	1	NE	LOW		
0615	FRIGATE	1	"	100'		
0616	WEDGETAIL	1	"	400'		
0617	"	1	N	"		
0617	SOOTY TERN	1	N	"		
0621	WEDGETAIL	1	S	"		
0622	--	--	--	--	STOPPED FOR OCEANOGRAPHIC SAMPLING.	
0625	WEDGETAIL	1	E	"		
0627	"	2	E	"		
0632	"	1	SE	"		
0634	"	1	"	"		
0635	"	1	E	"		
0635	"	1	E	"		
0635	SOOTY TERN	3	S	"		
0635	"	1	S	"		
0636	FRIGATE	1	O	200'		
0638	BROWN BOOBY	1	S	25'	1mm.	
0643	WEDGETAIL	1	SE	LOW		
0646	SOOTY TERN	1	N	20'		
0651	WEDGETAIL	1	S	LOW		
0653	"	2	S	"		
0655	"	1	S	"		
0658	FRIGATE	1	SE	150'		
0703	--	--	--	--	UNDERWAY - COURSE SW.	
0712	--	--	--	--	LORAN GUY WIRES FAINTLY VISIBLE. NO BIRDS ABLE TO BE SEEN IN AIR.	
0716	SOOTY TERN	3	S	LOW		
0722	FRIGATE	1	O	100'		
0727	"	1	"	"		
0730	"	1	NE	40'		
0734	SOOTY TERN	1	N	20'		
0739	FRIGATE	4	NE	10/150'	OVER SAND IS. - BIRDS VISIBLE ON LORAN GUY WIRES.	
0746	SOOTY TERN	1	"	30'		
0750	" "	1	N	30'		
0758	WEDGETAIL	1	S	LOW		
0755	COMMON NODDY	1	SE	LOW		
0755	JAEGER	1	SE	40'	1mm - MUCH BARRING AND SCALLOPING - especially below. RETICES NOT plainly seen	
0800	--	--	--	--	ENTER GRID -- COURSE CHANGE	



AN GRID

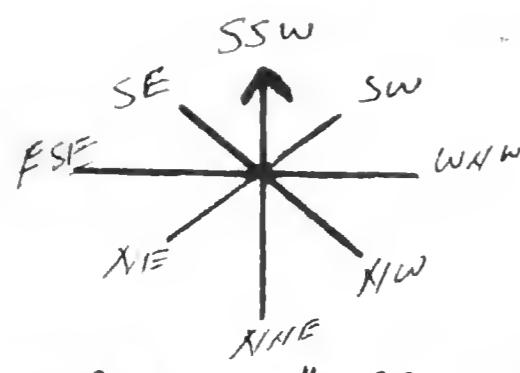
DATE 7 SEPT. 64
Pg. # 2

time	species	#	dir.	hgt.	remarks	loc.
0808	Sooty Tern	1	NW	30'		
0809	Sooty Tern	3	S	low		
0810	Wedge-tail	1	NNW	low		
0820	Wedge-tail	1	WNW	low		
0823	Wedge-tail	1	Q	low		
0824	Sooty Tern	1	SSW	low		
0829	Sooty Tern	1	WNW	low		
0830	Wedge-tail	1	NW	low		
0830	Sooty Tern	3	NNE	low		
0900	Wedge-tail Sh	1	NNW	low		
0910	Bulwer's skt	1	NNW	low		
0912	Wedge-tail	1	N	low		
0912	Bulwer's skt	1	NNW	low		
0915	Ruddy Turnstone	7	Q	To 50'		
0922	Wedge-tail	2	ESE	low		
0944	Wedge-tail	2	SSE	low		
1000	Sooty Tern	1	NNW	40'		
1009	Wedge-tail	1	NNW	low		
1026	"	1	SSE	"		
1029	Sooty tern	2	ESE	35'		
1030	Wedge-tail	2	WSW	low		
1035	- - -	- - -	- - -	- - -		
1036	Bulwer's	1	NNW?	low	5' shark sighted cruising NNW following shark?	
1038	Wedge-tail	2	NNW	"		
1045	"	1	G	"		
1046	K-T Tropic	1	S	"	sitting in water	
1104	- - -	- - -	- - -	- - -	same tropic bird seen sitting on water	
1125	- - -	- - -	- - -	- - -	1/4 mi. to starboard	
					stop to collect large fish-ball - attached.	
					gooseneck barnacles collected; small fish swimming under ball.	
1152	Wedge-tail	1	SE	low		
1155	"	2	WSW	"	1 dark phase	
1156	Fairy tern	1	ENE	10'	shot - IDW	
1205	Wedge-tail	2	Q	low	around fairy tern	
1209	"	1	Q	"	joined above pair	



DATE 7 Sept 64
Pg. # 3

time	species	#	dir.	hgt.	remarks	loc.
1230	wedgetail	1	SSE	low	collected - RWM	
1233	Shear. Pet	1	SSE	low	distant	
1250	wedgetail	1	NNW	low		
1252					Shark swimming by dead organism of some sort	
1300	Bird	1	SSE	low	Pterodroma pattern but not flight - low, horizontal, much flapping, little gliding. Perhaps immature grey-back tern.	
1306	wedgetail	1	NNW	low		
1316	"	1	NNW	"		
1341	Bonin Is.	1	SSE	"	Got up off water	F - 2 - 35
1352	Sooty Tern	5				
	Fairy Tern	2	ENE	low	Not feeding	
	wedgetail	1-2				
1352	Tropicbird(?)	1	ENE	50'	over flock - RWM	
F 1400	Sooty Tern	28	NNW	50'	Not feeding	
		30±2				
1400	wedgetail	1	SSW	low		
1404	Frigate	23	E	75'	over flock of Sooty Terns	
1414	Fairy Tern	1	E	low		
1414	Bird	1	WSW	low		
1425	wedgetail	1	SSE	"		
1445	White Neck	1	SSE	"		
1501	wedgetail	1	SSE	"		
1521	Sooty Tern	2	SSE	80'		
1539	R-T Tropic	1	NNW	100'		
1549	Bird	1	ESE	low	Flew like tern, upper wing markings like R-F Boobys, appeared dark below.	
1555	Sooty Tern	1	SSE	"		
1556	Shear Pet	2	SSW	"		
1623	wedgetail/ Sh.	1	NNW	low		
1648	Bulwer's Petrel	1	SSE	low		
1725	wedgetail	1	NNW	"		
1725					3 Pigeons SSE jumped out of H ₂ O	
1815	wedgetail	3	SSE	low	spouts 3-5' high	
1825					Sunset	
1825	wedgetail	1	W	low		
2040	Bird	1	NNW	50'	Possibly tropicbird - fluttering flight, white off stem	
2052	Bird	1	NNW	low		
2230	Bird	1	NNW	50'		
2315					Now headed SW change?	



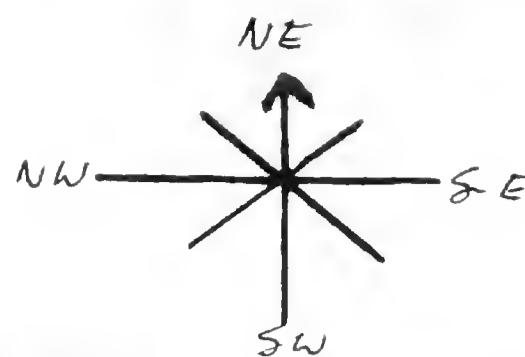
DATE 8 SEPT 64
Pg. # 1

time	species	#	dir.	hgt.	remarks	loc.
0020	UNKNOWN	1	NE	80'	white bird probably fairy tern	
0320	BIRD	1	NNE	Low	PROBABLE pterodroma	
0335	FAIRY TERN	1	NNE	70'	CALLED + FLAPPING VERY RAPIDLY.	
0435	TROPICBIRD	1	ESE	80'	HIT MAST.	
0445	BIRD	1	SSW	15'		
0550	TERN	1	NNE	50'	whitish - flying in straight line. PROBABLE Tropicbird. looks like Sooty Bot flies like sooty. LIGHT low	
0610	- - - - -	-	- - -	- - -	SUNRISE	
0615	- - - - -	-	- - -	- - -	- Stop for morning station	
0630	Shear-Pet	1	SSE	low	distant	
0642	Shear-Pet	1	NW	"	distant	
0651	Wh. N. Petrel	1	SSE	"		
0651	Sooty Shear	1	SSE	"	3 flying together briefly	
0651	Shear Pet	1	SSE	"	distant	
0659	Pterodroma	1	S	"		
0701	Sooty Shear	1	S	"		
0715	Pterodroma	1	S	"		
0715	- - - - -	-	- - -	- - -	Cinderway	
0721	Sooty Tern	1	NNE	40'		
0725	Pterodroma	1	SSE	low	Wh Neck or D. Rung	
0730	- - - - -	-	- - -	- - -	R-T Tropic found on deck from nighttime collision - flew WNW.	
0740	Wh NK Petrel	1	SSE	low		
0746	"	2	SSE	low		
0751	Pterodroma	2	SSE	low	distant	
0753	Wh NK Petrel	1	SSE	low		
0757	Pterodroma	1	SSE	"		
0758	R-T Tropic	1	NW	80'	circled then flew NW	
0828	R-T Tropic	1	NNE	30'		
0832	Wh-n Petrel	1	SSE	Low		
0913	Pterodroma	1	SSE	Low		
0948	Bulwer's Pet	1	NNE	Low	in n or D-r	
1000	Sooty Tern	2	-	-		
	Wedge-tail	2	-	-		
	Pterodroma	3	-	-	Not feeding	
1012	WEDGE-TAIL	1	NW	low		
1019	Pterodroma	1	NW	"		
F 1035	SOOTY TERN	71	-	-	2055 mm. Flock not feeding	
	WEDGE-TAIL	551 (3)	1000'	-		
	PTERODROMA	5	-	-	Looked like Bonin without "HASH MARK" on underwing. Medium sized pterodroma (DARK - Bumps - 1000' - 954 ft.)	
H05	WEDGE-TAIL	1	NW	Low		
1155	Shear-Pet	1	NE	low		
1155	SOOTY TERN	1	"	"	~DISTANT	



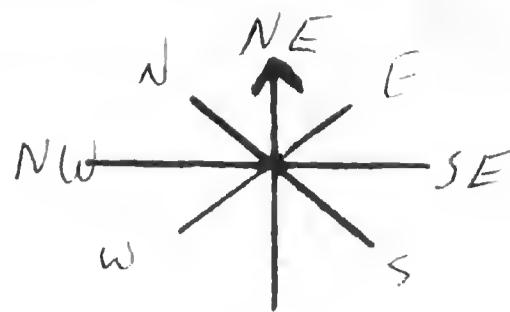
DATE 8 SEPT 64
Pg. # 2

time	species	#	dir.	hgt.	remarks	loc.
1257	R-T Tropic	1	SSW	130'		
1311	Wh Neck Pet	1	NNE	low		
1315	Wedge-tail	1	ESE	"		
1320	Sooty Tern	2	ESE	25'		
1322		2	SE	45'		
1331	Wedge-tail	1	NW	low		
1406	"	1	SE	"		
1443	Wedge-tail	1	SE	Low	dark phase	
1513	White-necked Pet.	1	NNE	Low		
1623	Bulwers	1	SW	"	got up off water	
1710	White-tail Tropic	1	ESE	80'		
1730	Pterodroma	2	NNE	low		
1734	Bulwers	1	NNE	low		
1735	- - -	- - -	- - -	- - -	change course to NW	
1741	Shear-Pet	1	SSW	low	possibly Sooty Shearwater; all dark, instant	
1800	Wedge-tail	1	ESE	"		
1830					Sundown	
1842	Shear-Pet	1	W	Low		
2155	Tropic bird	1	SE	low		
2200	- - -	- - -	- - -	- - -	Two VERY BRIGHT FLASHES (BURSTS) OF LIGHT IN SW SKY ABOUT 45° ABOVE HORIZON.	
2210	- - -	- - -	- - -	- - -	- - -	
2210	- - -	- - -	- - -	- - -	- - -	
2332	Bird	1	NW	100'	COURSE CHANGE TO NE Fairy Tern or Tropic bird	
2340	Tropic bird	1	SE	80'		



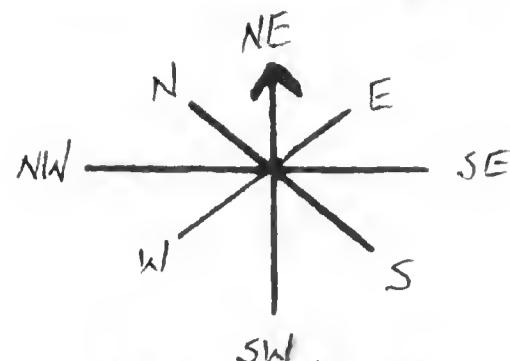
DATE 9 Sept 64
Pg. # 1

time	species	#	dir.	hgt.	remarks	loc.
0040	Tern ?	1	SW	15'		
0330	Birn Tropic	1	NW	80'	→ Flew over, then a minute later came back to the ship but then turned around and went NW again - as if to look at the ship a second time.	
0510	Bird	1	S	60'		
0545	Tropic Bird	1	N	80'		
0615	Bulwer's Petrel	1	WSW	Low		
0619	—	—			Morning station also sun in eye	
0621	Sooty Shear	1	S	Low		
0630	Wedge-tail	1	NE	Low		
0700					Underway	
0713	TROPIC BIRD	1	NNE	Low	- DISTANT	
0722	BULWERS PET.	1	S	"		
0740	Bulwer's	1	SW	Low		
0746	SOOTY TERN	1	N	Low		
0748	" "	3	S	30'		
0750	DARK-RUMP Pet	1	E	Low		
0803	Wh. Tropic	1	NS	to 75'	circled ship 3 times	
0825	Sooty Shear	2	S	Low		
0838	Sooty Shear	1	S	Low		
0909	Shear - Pet	1	S	"	distant	
0909	Pterodroma	1	SE	"	W-Nor D-R ; off stern	
0912	Sooty Tern	2	NW	to 30'		
0930	Sooty Shear	1	SSE	to 20'		
0930	Dark Rump P.	1	S	Low		
0937	Shear - Pet	1	SW	Low		
0937	Sooty Tern	1	WSW	50'	distant. off stern	
0948	Sooty Shear	1	S	Low		
0955	Wh. N. (?) Pet.	1	SW	to 20'	white neck seen very briefly	
1012	Sooty Shear	2	ESE	Low		
1018	Bulwer's ?	1	SW	Low		
1021	Fairy Tern	1	NE	To 50'	appears to be feeding.	
1026	Bulwer's ?	1	SW	Low		
1030	Sooty Shear	1	ESE	Low		
1039	Sooty Shear	1	S	Low		
1045	Bulwer's Pet	2	SW	Low		
1112	Bonin Is Pet	1	SE	Low		
1119	(Bonin Is) Pet	1	NW	Low		
1120	Sooty Tern	1	W	50'		



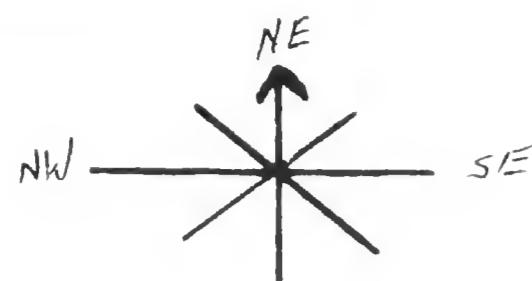
DATE 9 Sept 1964
Pg. # 2

time	species	#	dir.	hgt.	remarks	loc.
1430	Sooty Shear	2	SE	Low		
1136	Sooty Shear	1	SE	Low		
1153	Sooty Shear	1	SE	Low		
1156	Sooty Shear	1	SE	Low		
1159	(Bonin Is) Pet	1	NE	Low		
1200	Tern, Sooty	5	NE	30'	-2 immatures not feeding.	
1215	Sooty shear	1	SE	Low		
1250	Bulwer's Pet	1	S	"		
1332	"	1	N	"		
1333	Sooty shear	2	SSE	"		
1347	"	1	SSE	"		
1400	Dark-r Petrel	1	NE	Low		
1418	R-T Tropic	1	NE	Low to 40'		
1419	Wedge-tail Sh	1	SSW	Low		
1423	Sooty Shear	1	S	Low		
1426	Sooty Shear	1	SSE	Low		
1434	Tern	3	NE	60'	distant	
1436	Pterodroma	1	S	Low		
1458	Pterodroma	1	S	Low		
1513	Wedge-tail	1	SW	Low		
1514	(Bonin Is) Pet	1	NNW	Low		
1518	Sooty Shear	1	SW	Low		
1519	Bulwer's Pet	1	NW	Low		
1523	Sooty Shear	1	S	To 30'		
1524	D-R Petrel	1	WSW	Low		
1607	" "	1	NNW	"		
1608	SOOTY SHEAR	1	SE	"		
1608	" "	1	"	"		
1615	" "	1	"	"		
1622	PTERODROMA	1	SW	"	-W-N or D-R.	
1630	SOOTY SHEAR/WATER	2	S-SE	"	Noted light colored bill.	
1634	D-R. PETREL	1	NW	"		
1636	SOOTY SHEAR	1	SE	"		
1640	" "	1	"	"		
1641	PTERODROMA	1	SW	"	W-N or D-R.	
1647	SOOTY SHEAR.	1	SE	"		
1648	" "	1	SE	"		
1649	" "	1	"	"		
1649	D-R. Petrel	1	NW	"		
1651	SOOTY SHEAR	1	SW	"		
1652	" "	3	SE	"		
1652	" "	4	"	"		



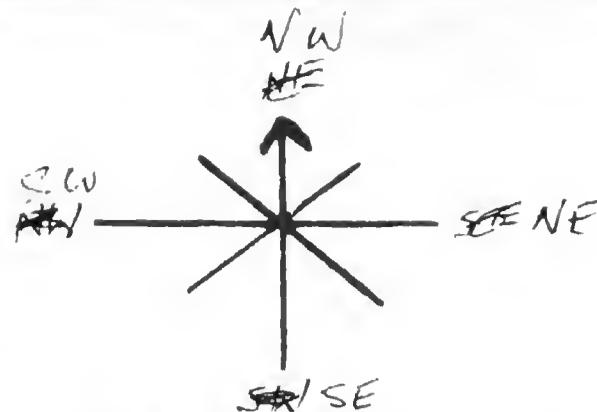
DATE 9 SEPT. 64
Pg. # 3

time	species	#	dir.	hgt.	remarks	loc.
31-59	SOOTY SHEAR	1	✓ SE	LOW		
1656	SKUA (?)	1	N-NE	70'	white wing patches seen by P.W. (could have been Jaegers - quite typically resembled shuas seen previously though fhd.)	
1700	SOOTY SHEAR	1	✓ SE	LOW		
1701	" "	1	✓ SE	LOW		
1702	" "	1	✓ S-SW	"		
1703	" "	1	✓ SE	"		
1706	" "	1	✓ SE	"		
F 1706	" "	5	✓ "	"	Net feeding - fhd	
1707	" "	2	"	"		
1708	" "	1	"	"		
1709	" "	1	"	"		
1709	Bulwer's	1	"	"		
1711	SOOTY shear	3	"	"		
1714	"	1	"	"		
1716	"	1	"	"		
1717	"	1	"	"		
1718	Pterodroma	1	NW	"		
1718	SOOTY shear	4	✓ SE	"		
1719	"	1	✓ SE	"		
1720	"	5	"	"		
1721	"	1	S	"		
1722	"	3	✓ SE	"		
1723	Pterodroma Bonin Is.	1	NW	"		
1724	SOOTY shear	1	✓ SE	"		
1725	"	5	"	"		
1726	"	1	"	"		
1727	"	1	"	"		
1728	"	2	"	"		
1729	"	1	"	"		
1730	Wh Neck Pet	1	NW	"		
1731	SOOTY shear	3	✓ SE	"		
1732	"	4	"	"		
1733	"	1	"	"		
1734	"	1	"	"		
1735	"	1	"	"		
1736	"	1	"	"		



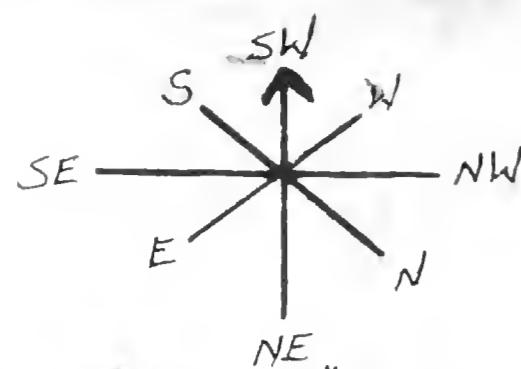
DATE 9 SEPT 64
Pg. # 4

time	species	#	dir.	hgt.	remarks	loc.
1737	SOOTY SHEAR	2	SE	LOW		
1740	" "	1	"	"		
1741	" "	2	"	"		
1742	" "	1	"	"		
1745	" "	1	"	"		
1745	D.-r. Petrel	2	SW	"		
1747	SOOTY SHEAR	2	SE	"		
1748	" "	1	"	"		
1750	" "	1	"	"		
1751	" "	1	"	"		
1751	" "	1	"	"		
1751	" "	1	"	"		
1752	" "	1	"	"		
1753	" "	2	SE	"		
1753	" "	1	E	"		
1753	SOOTY TERN	1	SW	40'		
1755	" "	1	W	LOW		
1755	SOOTY SHEAR	1	NW	"		
1755	" "	4	SE	"		
1757	D.-r. Petrel	1	SE	"		
1757	WEDGE-TAIL	1	SE	"		
1759	Pterodroma	1				
1759	SOOTY SHEAR	1	SE	"		
1800	" "	2	SE	"		
1800	" "	1	"	"		
1801	" "	1	"	"		
1802	" "	3	"	"		
1802	" "	1	"	"		
1803	" "	1	"	"		
1803	" "	2	SW	"		
1803	" "	2	"	"		
1804	" "	2	SE	"		
1805	" "	1	SE	"		
1806	" "	1	"	"		
1808	" "	2	SE	"		
1813	" "	2	S	"		
1814	" "	2	"	"		
1815	D.-r. Petrel	1	"	"		
1815	SOOTY SHEAR	2	NW	"		
1816	" "	1	"	"		
1817	" "	3	"	"		
1817	" "	1	"	"		
1818	" "	2	"	"		
1819	" "	1	"	"		
1819	" "	1	"	"		
1819	" "	1	"	"		
1820	" "	1	"	"		



DATE 9-SEPT 64
Pg. # 5

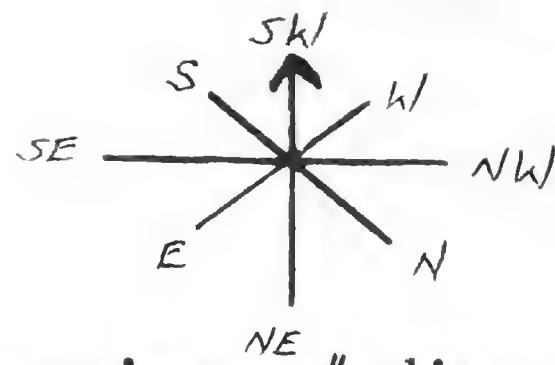
time	species	#	dir.	hgt.	remarks	loc.
1821	SOOTY SHEAR	1	S	low		
1822	" "	1	S	"		77
1822	" "	1	S	"		67
1823	" "	2	S	"		67
1824	"	-	-	-	Sunset	2
1824	" "	1	S	"		212
1826	" "	1	S	"		1
1826	" "	1	S	"		0
1826	" "	1	S	"		
1826	" "	1	S	"		
1829	" "	1	S	"		
1830	" "	1	S	"		
1831	" "	1	S	"		
1840	" "	2	S	"		
1840	" "	1	S	"		
1842	" "	1	S	"		
1845	" "	1	S	"		
1900	"	-	-	-	Change course to NW	
2134	SOOTY TERN	1	NE	30'	CALLING	
2137	" "	1	"	50'	"	SW NNE
2204	SOOTY SHEAR	1	SE	TO 30'		SE
2206	" "	1	SE	"		
2236	SMALL PTERODROMA	1	E	low	PROBABLE BONIN Is. Petrel.	
2243	SOOTY SHEAR	1	SE	TO 30'		
2257	" "	1	SE	"		
2303	SOOTY TERN	1	NW	60'		
2304	SOOTY SHEAR	1	SE	TO 30'		
2323	" "	1	O	60'	circled ship	
2340	"	-	-	-	COURSE CHANGE TO SW	
2354	BIRD	1	NE	70'	TROPIC BIRD OR TERN	SE SW NW E N



3RD LEG

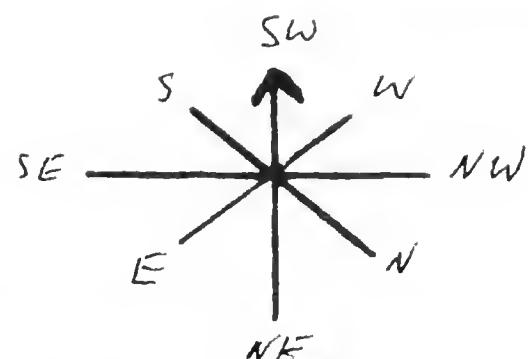
DATE 10 SEPT 64
Pg. # 1

time	species	#	dir.	hgt.	remarks	loc.
0056	R-T Tropic	1	NE	70'		
0115	Tropicbird	1	NE	60'		
0240	Fairy Tern	1	E	80'		
0300	Bird	1	NE	65'		
0321	Bird	1	NE	low		
0330	Tropicbird	1	E-S	40'		
0335	Bird	1	N	low		
0350	- - - - -	- - -	- - -	- - -	Rain squalls	
0352	R.T. Tropicbird	1	NE	50'	calling	
0354	Fairy Tern	1	ENE	low		
0356	Tropicbird	1	E	60'		
0400	"	1	NE	50'		
0401	Sooty Tern	1	NE	50'		
0405	W.L.T. Tropic	1	E	low	May have got up off water	
0415	Sooty Tern	1	NE	50'		
0421	" "	2	NE	40'	calling	
0431	" "	1	ESE	50'	"	
0434	Bird	1	E	50'		
0455	Tropicbird	1	SE	low	Tropicbird or Sooty Tern	
0550	Pterodroma	1	SW	low		
0610	- - - - -	- - -	- - -	- - -	SUNRISE - RAINY	
0620	- - - - -	- - -	- - -	- - -	STOP FOR OCEANOGRAPHIC SAMPLING.	
0624	SOOTY SHEAR	1	S	low		
0625	" "	3	SW	"		
0626	" "	8	"	"		
0629	" "	1	"	"	loose string	
0629	" "	2	"	"		
0630	" "	1	"	"		
0632	" "	15	"	"		
0632	" "	4	E	"		
0633	" "	3	SW	"		
0635	" "	1	"	"		
0632	" "	1	"	"		
0640	BONIN TYPE - Pterodroma	1	"	"		
0642	SOOTY SHEAR	5	"	"		
0645	" "	3	SW	"		
0645	D.R. Petrel	1	"	"		
0649	SOOTY SHEAR	2	5	"		
0650	WEDGE-TAIL	1	5	"		
0650	SOOTY SHEAR	1	5	"		
0651	" "	1	SW	"		
			SW	"		



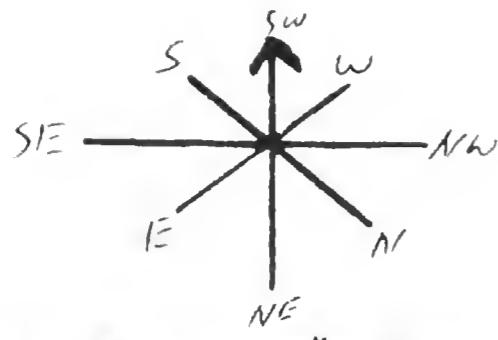
DATE 10 SEPT 64
Pg. # 2

time	species	#	dir.	hgt.	remarks	SEAS RELATIVELY HIGH	loc.
0701	SOOTY SHEAR	2	S	TO 50'			
0704	" "	4	SE	"			
0705	" "	2	"	"			
0714	" "	2	"	"			
0715	- - -	-	"	"			
0722	PTERODROMA	1	NW	LOW	- UNDERWAY - following OCEANOGRAPHIC SAMPLING. DISTANT		
0724	BONIN Is.	1	NW	"			
0733	PTERODROMA	1	"	"			
0742	WEDGE-TAIL	1	S	"			
0743	PTERODROMA	1	NW	"			
0744	"	1	"	"			
0754	WEDGE-TAIL	1	SE	"			
0805	Sooty shear	1	SSE	"			
0809	"	1	"	"			
0810	Pterodroma	1	N	"			
0811	Bonin Is	1	NNW	"			
0812	Sooty shear	2	SSE	"			
0815	- - -	-	-	-	16 min. signal		
0825	Sooty tern	1	NNW	"		can double monitor!	
0827	Pterodroma	1	"	"			
0828	Sooty shear	1	SSE	"			
0830	"	1	"	"			
0832	Shear-Pet	1	NNW	"	lost		
0833	Pterodroma	1	NNW	"			
0836	Sooty shear	1	SSE	"			
0841	- - -	1	-	-	engines slowed for mech trouble		
0844	"	1	"	"			
0847	"	1	"	"			
0848	"	2	"	"			
0849	"	1	"	"			
0850	"	1	"	"			
0850	PTERODROMA	1	"	"			
0850	"	1	NNW	"			
0854	Bonin Is	1	SSE	"			
0857	Shear-Pet	1	NNW	"	disturb		
0859	Sooty shear	1	SSE	"			
0901	Bonin Is	2	NNW	"			
0901	PTERODROMA	1	NNW	"	(White NC?)		
0904	"	1	"	"			
0905	- - -	-	-	-	- resume full speed		



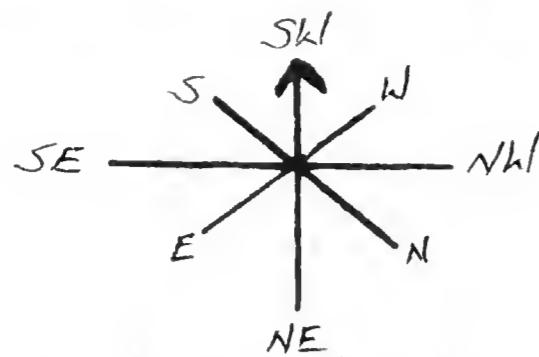
DATE 10 Sept 64
Pg. # 3

time	species	#	dir.	hgt.	remarks	loc.
2321	0910	Sooty shear	1	SSE	low	
	0912	"	1	"	"	
24	0916	Wedgetail	1	SW	"	
25	0917	Pterodroma	1	NNW	"	
15	0920	Bonin Is.	1	NNW	"	
	0924	Sooty shear	1	SSE	"	
	0924	"	1	SE	"	
	0925	"	1	"	"	
	0925	"	1	"	"	
	0932	"	1	SSE	"	
	0933	"	1	"	"	
	0934	"	1	"	"	
	0935	"	1	"	"	
	0936	Pterodroma	1	NNW	"	Wh NK?
	0945	Sooty shear	1	SSE	"	
26	0953	Wh NK Pet	1	NW	"	
	0956	Sooty shear	1	SSE	"	
	0957	"	1	"	"	
	0959	AR NK Pet	1	NNW	"	
	1008	Sooty shear	1	SSE	"	
	1010	Sooty Shear.	1	SSE	low	
	1023	Sooty Shearwater	1	SE	low	
	1024	" "	1	SE	low	
	1026	" "	1	S	"	
	1029	" "	2	S.	"	
	1031	Pterodroma	1	SE	low	Possibly dark-rumped - Pet Xer)
27	1031	Shearwater-Petrel	1	NE	low	
	1033	Sooty Shearwater	1	S	low	
	1038	Shearwater Petrel	1	S	low	
15	1042	Sooty Tern	3	NE	40'	
	1044	Sooty Shearwater	1	S	low	
	1050	" "	1	S	"	
	1051	Wedge-tail sh.	1	"	"	
	1052	" "	1	"	"	
	1053	" "	1	"	"	
	1056	Sooty Shearwater	1	S	low	



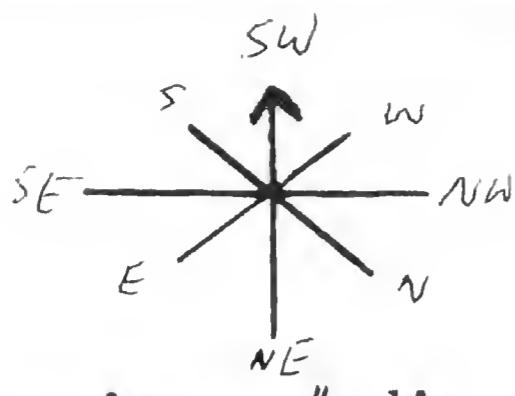
DATE 10 Sept 1964
Pg. # 4

time	species	#	dir.	hgt.	remarks	loc.
1106	Sooty Shearwater	1	S	Low		
1108	" "	1	S	Low		
1110	" "	3	SE	Low to 15'		
1120	" "	1	"	"		
1124	" "	1	"	"		
1127	" "	1	N	"		
1130	Fairy Tern	1	E	"		
1133	" "	1	SE	30'		
1133	Sooty Shearwater	1	SW	Low		
1137	Bonin Is. Pet.	1	S	Low		
1139	Sooty Shearwater	1	SW	Low		
1200	" "	1	NW	"		
1205	" "	1	SSE	"		
1210	" "	1	SSE	"		
1211	" "	2	"	"		
1211	" "	1	"	"		
1213	Fairy Tern	1	S	"		
1213	Sooty Shear	1	SSE	Low		
1215	Pterodroma	1	S	"		
1216	Sooty Shear	SV	SSE	"		
1217	D.-T. Pet.	1	②	TOGO'	- APPROACHED SHIP, FLEW HIGH, BARFED, FLEW DOWN TO	
1217	TERN, Sooty	1	SE	Low		
1220	Sooty Shear	1	SE	"		
1220	Pterodroma	1	S	"		
1222	Sooty Shear	2	SSE	"		
1223	Fairy Tern	1	S	20'		
1224	Sooty Shear	1	SSE	Low		
1225	Pterodroma	1	S	Low		
1226	Fairy Tern	1	S	30'		
1226	Sooty Shear					
1230	Sooty Shear	3	SSE	Low		
1233	" "	2	"	"		
F 1234	Sooty TERN	20±5	②	TO 90'	Not SEEN TO Feed - DISTANT.	
1236	Sooty Shear	1	SSE	Low		
1237	Fairy TERN	1	W	10'		
1238	Sooty Shear	1	SSE	Low		
1238	" "	1	"	"		
1238	" "	1	"	"		
1239	" "	1	SW	"		
1240	" "	2	SSE	"		
1242	" "	1	"	"		
1242	" "	1	"	"		
1242	" "	1	"	"		
1243	" "	1	SSE	"		
1244	" "	1	"	"		
1246	" "	1	"	"		



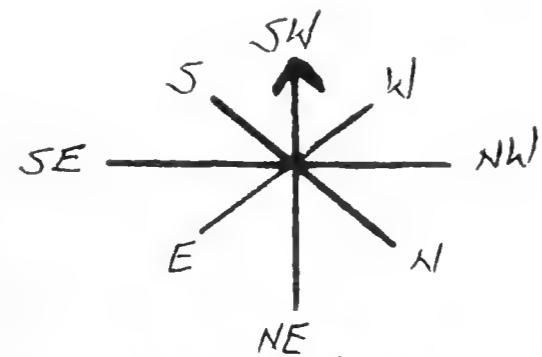
DATE 10 SEPT 64
Pg. # 5

time	species	#	dir.	hgt.	remarks	loc.
3-57	1248	SOOTY SHEAR	1	SSE	LOW	
	1248	"	1	"	"	
1250	"	"	1	"	"	
1250	"	"	1	"	"	
1251	SHEAR - PET.	1	NE	"		
1253	SOOTY SHEAR	1	SSE	"		
1255	"	"	1	"	"	
1256	"	"	2	"	"	
1256	"	"	1	"	"	
1256	"	"	1	"	"	
1258	"	"	1	"	"	
1259	"	"	1	"	"	
1300	"	"	1	"	"	
1301	"	"	1	"	"	
3-6	1304	"	1	SW	"	
	1304	"	1	SSE	"	
	1306	"	1	"	"	
3-8	1307	Wedgetail	1	NW	"	
	1309	SOOTY shear	1	SSE	"	
	1310	"	1	"	"	
3-12	1313	Bonin ls.	1	SE	"	
	1315	SOOTY shear	2	SSE	"	
	1315	"	1	"	"	
	1316	"	1	"	"	
	1317	"	1	"	"	
	1319	"	1	"	"	
	1320	Bonin ls.	1	NNW	"	
	1324	Wedgetail	1	SE	"	
	1325	SOOTY shear	1	SSE	"	
	1328	Wedgetail	1	SE	"	
	1329	"	1	"	"	
	1331	"	1	"	"	
	1331	"	1	"	"	
	1331	SOOTY shear	1	SSE	"	
	1334	"	1	"	"	
	1338	"	1	"	"	
	1341	"	1	"	"	
	1342	"	1	"	"	
	1344	"	1	"	"	
	1350	"	1	"	"	
	1354	"	1	"	"	
	1355	"	3	"	"	
	1356	"	1	"	"	



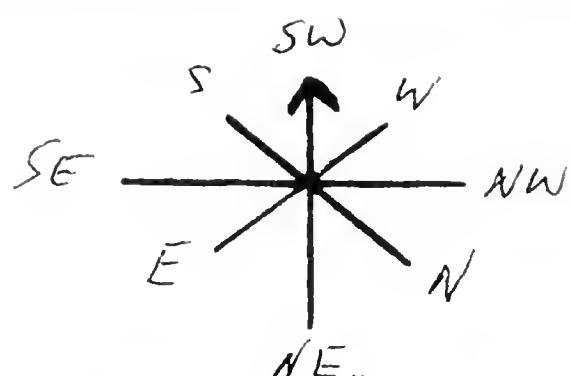
DATE 10 Sept 64
Pg. # 6

time	species	#	dir.	hgt.	remarks	loc.
1357	Sooty Shear	1	SSE	low		
1358	"	1	"	"		
1402	"	3	"	"		
1406	Sooty Shear	3	SSE	Low		20
1410	"	3	SSE	Low		10
1411	"	2	SSE	Low		10
1416	Sooty Shear	1	SSE	Low		10
1418	"	3	SSE	Low		10
1421	Sooty Shear	1	SSE	Low		10
1428	"	1	SSE	Low		10
1431	Sooty Shear	1	SSE	Low		10
1435	Sooty Shear	1	SSE	Low		10
1436	Bulwer's Pet	1	S	Low		
1439	Sooty Shear	1	SSE	Low		
F 1443	Sooty Shear	20	SSE	Low	Not feeding - (R)	
1446	Sooty Shear	1	SSE	Low		
1448	Sooty Shear	1	SSE	Low		
1451	Sooty Shear	1	SSE	Low		
1504	Bulwer's Pet	1	NW	Low		
1506	(Bonin Is) Pet	1	NNW	Low		
1509	Sooty Shear	2	SSE	Low		
1510	"	5	SSE	Low		
1510	"	1	SSE	Low		
1511	"	1	SSE	Low		
1514	"	1	SSE	Low		
1516	"	1	SSE	Low		
1517	"	1	SSE	Low		
1518	"	1	SSE	Low		
1528	"	1	SSE	Low		
1530	"	3	SSE	Low		
1532	"	1	SSE	Low		
1537	Pterodroma	1	NNW	Low		
1541	Sooty Shear	1	SSE	Low		
1543	R-Tropic	1	E	80'		
1546	Sooty Shear	2	SSE	Low		
1550	"	2	SSE	Low		
1550	"	1	SSE	Low		
1553	"	1	SSE	Low		
1557	Pterodroma	1	N	Low		
1600	Sooty Shear	1	SSE	Low		
1610	"	2	"	"		
1612	WEDGE-TAIL	1	SSE	"		
1615	PTERO DROMA	1	SW	"		



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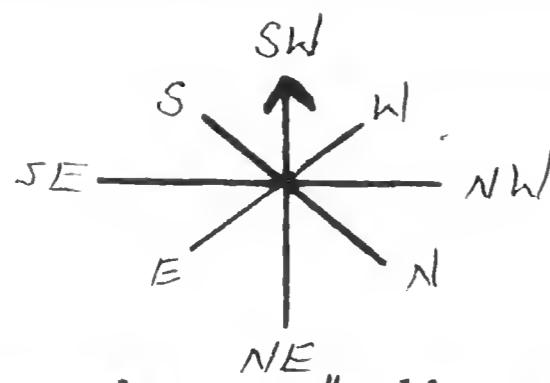
time	species	#	dir.	hgt.	remarks	loc.
1617	SOOTY SHEAR.	4	SSE	LOW		
1619	"	"	1	"	"	
1620	"	"	1	"	"	
1620	"	"	2	"	"	
1621	"	"	3	"	"	
1625	"	"	4	"	"	
1626	"	"	5	"	"	
1628	"	"	3	"	"	
1631	"	"	3	"	"	
1631	"	"	1	"	"	
1633	"	"	3	"	"	
1633	"	"	1	NW	"	
1637	"	"	2	SSE	"	
1638	"	"	2	"	"	
1639	"	"	4	"	"	
1641	"	"	6	"	"	
1641	"	"	3	"	"	
1644	"	"	5	"	"	
1645	"	"	1	"	"	
1648	BULWER'S	1	NW	"		
1653	SOOTY SHEAR	2	S-SE	"		
1654	"	"	1	"	"	
1655	"	"	1	"	"	
1657	"	"	2	"	"	
1658	"	"	1	"	"	
1702	"	"	4	"	"	
1704	"	"	2	"	"	
1705	"	"	2	"	"	
1708	"	"	1	"	"	
1711	"	"	2	"	"	
1712	"	"	1	"	"	
1713	"	"	1	"	"	
1713	"	"	1	"	"	
1713	"	"	1	"	"	
1715	BONIN Is.	1	NNW	"		
1716	sooty shear	1	SSE	"		
1717	"	2	"	"		
1717	"	1	"	"		
1719	"	1	"	"		
1721	"	1	"	"		
1722	"	1	"	"		
1722	"	1	"	"		



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Pg. # 8

time species # dir. hgt. remarks

time	species	#	dir.	hgt.	remarks	loc.
1725	Sooty shear	2	S	"	low	
1726	"	1	SSE	"		
1727	"	3	"	"		
1727	"	1	"	"		
1728	"	1	"	"		
1729	"	2	"	"		
1730	"	1	"	"		
1732	"	2	"	"		
1734	"	1	"	"		
1735	"	2	"	"		
1735	Bonin Is	1	NNW	"		
1736	Sooty shear	2	SSE	"		
1737	"	1	"	"		
1739	Bulwer's	1	NNW	"		
1740	Sooty shear	1	SSE	"		
1741	Bulwer's	1	NNW	"		
1742	Sooty shear	1	SSE	"		
1742	"	1	"	"		
1743	"	1	"	"		
1744	"	3	"	"		
1745	"	1	"	"		
1745	"	1	"	"		
1746	Bonin Is.	1	"	"		
1747	Sooty shear	2	"	"		
1749	"	1	"	"		
1748	"	2	"	"		
1749	"	3	"	"		
1750	" "	2	"	"		
1751	" "	3	"	"		
1751	" "	1	"	"		
1753	" "	1	"	"		
1754	" "	2	"	"		
1756	" "	3	"	"		
1758	" "	3	"	"		
1800	" "	2	"	"		
1802	" "	2	"	"		
1803	" "	2	"	"		
1804	" "	3	"	"		
1804	SHEAR - PAST.	1	N	"		
1805	SOOTY SHEAR	2	S-SSE	"		
1806	" "	5	"	"		
1807	" "	5	"	"		



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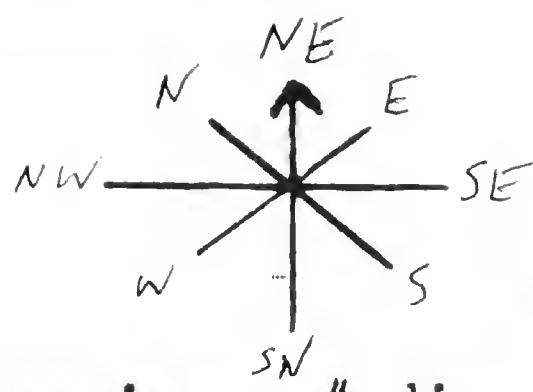
time	species	#	dir.	hgt.	remarks	loc.
13-37	SOOTY SHEAR	10	S-SE	LOW		
1810	" "	2	"	"		
1812	" "	3	"	"		
1812	" "	4	"	"		
1814	" "	5	"	"		
1815	" "	3	"	"		
1818	" "	2	"	"		
1820	" "	1	"	"		
1824	" "	2	"	"		
1827	" "	1	"	"		
1828	" "	1	"	"		
✓ 1828	PTERODROMA	1	W	"		
1829	SOOTY SHEAR	4	S-SE	"		
✓ 1829	R.T. TROPIC	1	NE	"	AROSE FROM H ₂ O	
CA 1830	SOOTY SHEAR.	2	S-SE	"	--- SUNSET	
1832	" "	2	"	"		
1835	" "	1	"	"		
1836	" "	3	"	"		
1837	" "	1	"	"		
1837	" "	1	"	"		
1837	" "	1	"	"		
1839	" "	1	"	"		
1839	Pterodroma	2	222	"		
1840	SOOTY Shearwater	6	SSE	"		
" "	"	2	"	"		
1843	" "	1	"	"		
1844	" "	1	"	"		
1845	" "	1	"	"		
1845	Bulwer's Petrel	1	NNE	"		



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Pg. # 10

time species ^{SW} # dir. hgt. remarks loc.

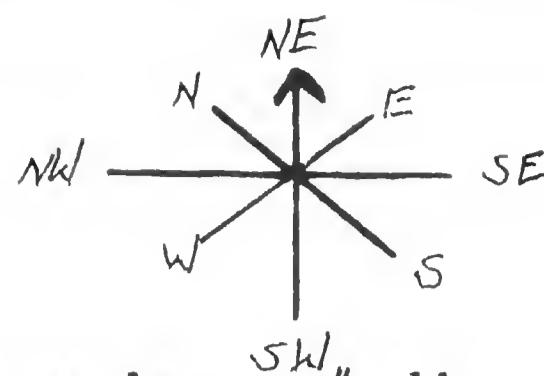
1850						change course to NW.	
2005	Sooty Shearwater	1	NW	low			
2259	Pterodroma	1	NW	low			
2340	- - - - -	- - - - -				change course to NE	
2352	Sooty Shear	1	NW	low			
0							



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Pg. # 1

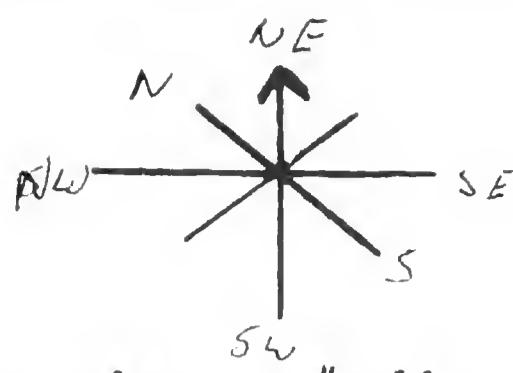
time species # dir. hgt. remarks loc.

0022	- - -	- - -	-	-	-	- flash over NW horizon	
0150	Bird					calling	
0155	Shear-Pet	1	SSE	low			
0228	Fairy tern	1	NE	10'			
0607	Sooty Shear	1	SE	low		SUNRISE!	
0613	"	2	SSE	low			
0625	- - -	-	-	-	-	- Morning Station	
0627	Sooty Shear	3	SE				
0627	Wedgetail	1	SE	low			
0630	Sooty Shear	1	E				
0633	" "	1	E			: apparently detouring around ship	
0646	" "	1	E				
0658	" "	1	E				
0658	Shear-Pet	1	SE	low			
0700	Sooty Shear	2	E				
0700	- - -	-	-	-	-	- underway	
0715	Bulwer's	1	SE	low			
0737	Sooty Shear	1	SE	low			
0739	" "	1	?	"			
0741	Shear-Pet	1	W	"			
0747	Sooty Shear	2	SE	"			
0750	" "	1	SE				
0755	" "	3	SE				
0755	W.N. Petrel	1	N	low			
0757	Sooty Tern	3	E	"			
0757	Sooty Shear	4	SE	"			
0757	Wedgetail	1	SE	"			
0804	SOOTY SHEAR	2	SE	"			
0804	" "	2	"	"			
0806	" "	2	"	"			
0807	" "	1	"	"			
0809	" "	1	"	"			
0812	" "	2	"	"			
0814	" "	2	"	"			
0816	D.-N. Petrel	1	"	"			
0818	SOOTY SHEAR	1	"	"			
0818	" "	1	"	"			
0819	" "	1	"	"			
0820	" "	1	"	"			
0824	" "	1	"	"			
0824	SHEAR-Pet	1	SW	"			
0825	W.N. Petrel	1	S	"			
0827	Pterodroma A	1	NNW	"			



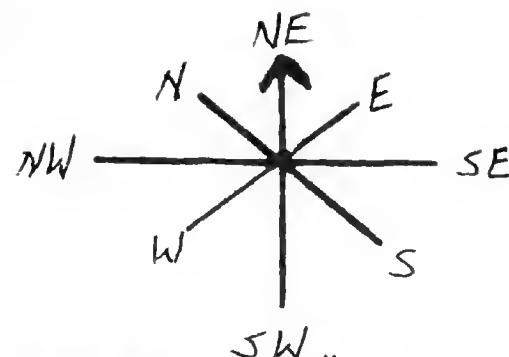
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Pg. # 2

time	species	#	dir.	hgt.	remarks	loc.
0830	SOOTY SHEAR	2	SSE	LOW		
0830	WEDGETAIL	1	SSE	"		
0832	PTERODROMA	1	S	"		
0833	SOOTY SHEAR	1	SE	"	DISTANT	
0834	Wedge-tail	1	SSE	"		
0835	Sooty shear	1	"	"		
0836	"	5	"	"		
0836	Pterodroma	1	"	"		
0837	Wedge-tail	1	"	"		
0838	"	1	"	"		
0842	"	3	"	"		
0842	W.-N. Petrel	3	"	"		
0845	WEDGETAIL	1	SSE	"		
0847	BONIN TYPE	1	NW	"		
0847	WEDGETAIL	2	"	"		
0855	SOOTY SHEAR	1	SE	"		
0900	Dark. Petrel	1	SW	"		
0903	WEDGETAIL	1	S	"		
0905	SOOTY SHEAR	1	SE	"		
0907	"	1	"	"		
0907	"	1	"	"		
0910	"	2	"	"		
0912	"	1	"	"		
0915	"	2	"	"		
0919	"	2	"	"		
0920	"	1	"	"		
0920	Dark. Petrel	1	"	"		
0928	SOOTY SHEAR	1	W	"		
0930	"	2	SSE	"		
0934	"	2	"	"		
F 0942	"	6	"	"		
0945	"	1	"	"		
0945	PTERODROMA	1	S	"		
0948	"	1	N	"		
0948	SOOTY TERN	1	"	10		
0949	SOOTY SHEAR	1	SSE	LOW		
0953	"	1	"	"		
0954	"	4	"	"		
0956	Bulwer's	1	"	"		
0958	Sooty shear	1	"	"		
1000	"	1	"	"		
1001	"	1	"	"		
1001	"	1	"	"		
1003	"	1	SSE	"		
1011	(Bonin) S/P	2	ESE	LOW		



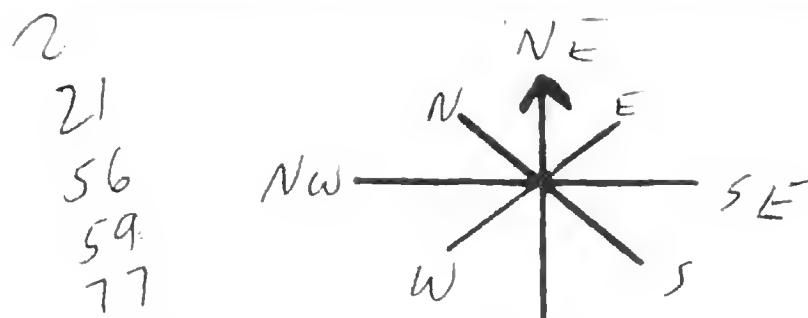
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Pg. # 3

time	species	#	dir.	hgt.	remarks	loc.
1012	Sooty Shear	1	SSE	low		
1012	Pterodroma	1	NNW	low		
1014	Sooty Shear	1	SSE	lo		
1017	Sooty Shear	1	SSE	low		
1022	"	2	SSE	low		
1025	"	3	SSE	low		
1026	"	2	SSE	low		
1028	"	2	SSE	low		
1034	"	2	SSE	low		
1034	"	1	SSE	low		
1036	"	2	SSSE	low		
1041	"	3	SSE	low		
1043	"	1	SSE	low		
1045	"	1	SSE	low		
1047	"	2	SSE	low		
1049	"	2	SSE	low		
1051	"	3	SSE	low		
1054	"	1	SSE	low		
1056	"	1	SSE	low		
1056	D-r Petrel	1	SW	low		
1100	Sooty Shear	3	SSE	low		
1101	"	1	SSE	low		
1106	"	1	SSE	low		
1107	"	1	SSE	low		
1108	"	1	SSE	low		
1116	"	4	SSE	low		
1111	"	1	SSE	low		
1114	"	1	SSE	low		
1115	"	1	SSE	low		
1120	"	1	SSE	low		
1128	"	1	SSE	low		
1134	"	1	SSE	low		
1141	"	2	SSE	low		
1146	"	1	SSE	low		
1153	"	1	SSE	low		
1155	"	2	SSE	low		
1157	"	1	SSE	lo		
1202	(Bonin Is) Pet.	1	SW	low		
1241	D-r. Pet.	2	W	"		
1246	SOOTY SHEAR	1	SE	"		



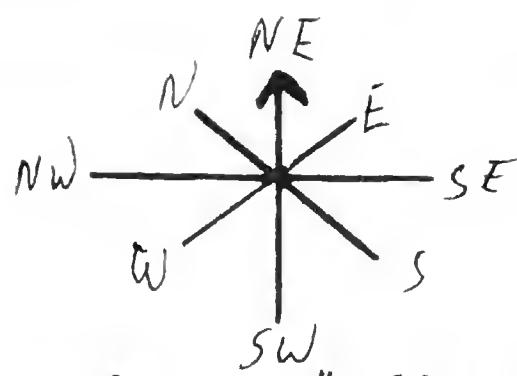
DATE 11 SEPT 64
Pg. # 4

time	species	#	dir.	hgt.	remarks	loc.
31-99	SOOTY SHEAR	1	SE	LOW		
1310	" "	5	"	"		
1311	" "	1	"	"		
1312	" "	1	"	"		
1314	" "	1	"	"		
1314	" "	1	"	"		
1316	" "	1	SSE	"		
1316	D.-R. PETREL	2	"	"		
1321	SCOTY SHEAR	2	SW	TO 60'		
1322	" "	5	"	"		
1324	" "	1	"	"		
1327	" "	1	"	"		
1329	" "	1	"	"		
1331	" "	2	"	"		
1331	" "	4	"	"		
1333	" "	3	"	"		
1334	" "	4	"	"		
1336	" "	4	"	"		
1337	" "	1	"	"		
1338	" "	5	"	"		
1341	" "	6	"	"		
1343	" "	1	"	"		
1345	" "	1	"	"		
1345	" "	2	"	"		
1345	D.-r. Petrel	1	NW	"		
1345	WEDGE TAILED	1	"	"		
1346	D.-r. Pet.	2	"	"		
1346	Pterodroma	2	"	"		
1346	BONIN TYPE	1	SW	"		
1350	SOOTY SHEAR	1	SSE	"		
1352	" "	1	"	"		
1352	" "	3	"	"		
1353	" "	1	"	"		
1354	" "	2	"	"		
1354	" "	2	"	"		
1354	PTERODROMA	1	NW	"		
1356	FAIRY TERN	1	NE	LOW		
1356	SOOTY SHEAR	8	SSE	"		
1358	" "	3	"	"		
1401	" "	7	"	"		
1405	" "	2	"	"		
1410	" "	4	SSE	LOW		
1410	D.-r Petrel	1	NSE	H. 40'	light winds.	
1414	SOOTY SHEAR	2	SSE	LOW		
1415	"	3	SSE	LOW		
1417	"	2	SSE	LOW		
1418	"	1	SSE	LOW		
1422	"	2	SSE	LOW		
1424	D.-r Petrel	1	S	LOW		



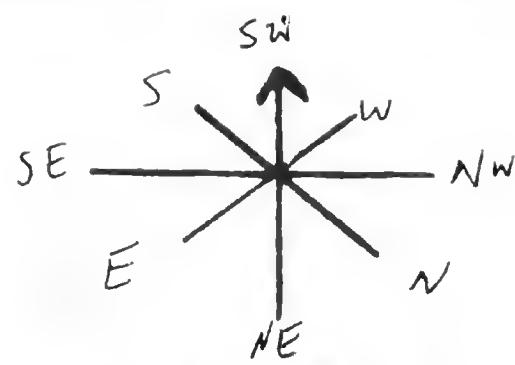
DATE 11 Sept 1964
Pg. # 5

time	species	#	dir.	hgt.	remarks	loc.
1420	Sooty Shear	2	SSE	low		
1428	"	2	SSE	low		
1429	D-r Petrel	1	SW	low		
1431	Sooty Shear	3	SSE	low		
1433	"	1	SSE	low		
1435	"	2	SSE	low		
1435	"	1	SSE	low		
1437	"	1	SSE	low		
1437	"	1	SSE	low		
1441	"	1	SSE	low		
1444	"	1	SSE	low		
1447	"	1	SSE	low		
1448	"	1	SSE	low		
1456	"	2	SSE	low		
1500	"	1	SSE	low		
1504	"	1	SSE	low		
1518	"	1	SSE	low		
1520	"	2	SSE	low		
1521	"	1	SSE	low		
1528	"	1	SSE	low		
1529	"	1	SSE	low		
1532	Pterodroma	1	NNW	low		
1537	Sooty Shear	1	SSE	low		
1539	Sooty Shear	1	SSSE	low		
1543	"	1	SSE	low		
1552	D-r Petrel	1	SSE	low		
1557	Sooty Shear	1	SSE	low		
1558	"	1	SSE	low		
1558	D-r Petrel	1	SE	low		
1605	Sooty Shear	2	SSE			
1610	" "	1	S			
1617	" "	2	S			
1639	" "	1	SSE			
1641	" "	2	S			
1649	Bonin Petrel	1	S	low		
1705	Sooty Shear	1	SE	low		
1709	Sooty Tern	1	SE	low		
1709	Sooty Shear	1	SE	low		
1711	"	3	SE	low		
1713	"	1	SE	low		



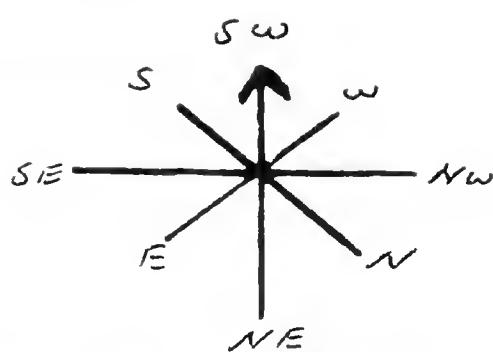
DATE 11 Sept 1964
Pg. # 6

time	species	#	dir.	hgt.	remarks	loc.
1716	Newz Shear	1	SE	low	Excellent viso-clue to species. Gray back with very prominent black M on wing. White underneath. Flew close to us, gliding	
1717	Sooty Shear	2	SE	low		
1718	"	1	SE	low		
1718	Bulwer's	1	NW	low		
1719	Wedgetail	1	S	low		
1728	Sooty Shear	1	SE	low		
1728	"	1	SSE			
1733	"	2	S			
1736	Wedgetail	1	SW	low		
1736	Pterodroma	1	NW	"		
1737	Sooty Shear	2	S	"		
1739	"	1	S			
1741	"	1	S			
1-3	Teens?	3	SSE	30'-low		
1747	Pterodroma	2	N	low		
1749	"	1	NW	low		
1749	Sooty Shear	2	SE			
1750	Bonin Pet	1	NW	low		
1752	Sooty Shear	1	VS	low		
1755	"	5	S	"		
1800	"	1	SSE	"		
1806	"	2	S	"		
1815	WEDGETAIL	1	S	"		
1821	SOOTY SHEAR	1	S	"		
1823	"	3	"	"		
1825	"	2	"	"		
ca. 1835	-	-	-	-	SUNSET	
1847	"	1	"	"		
1932	BIRD	1	SW	"		
2300					Changed course to a heading of NW	



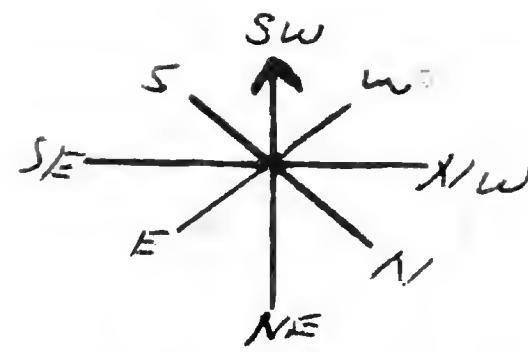
DATE 12 Sept 64
Pg. # 1

time	species	#	dir.	hgt.	remarks	loc.
0212	Bind	1	NW	50'		
0245	Bind	1	S	20'		
0305	Shear-Pet	1	S	low		
0320					- change course to SW	
0409	Fairy tern	1	SW	70'		
0458	"	1	NE	50'		
0510	"	1	NE	15'		
0551	Sooty tern	1	SE	40'		
0551	Shear-Pet	1	ESE	low		
0603	- - -	-	-	-	- slow for BT & water sampling	
0606	Wedgetail	1	NW	low		
CR 0615	- - -	-	-	-	- SUNRISE - VERY HEAVY CLOUDS & NUMEROUS RAIN SQUALLS IN AREA	
0625	- - -	-	-	-	- STOPPED FOR OCEANOGRAPHIC SAMPLING.	
0720	- - -	-	-	-	- UNDERWAY	
0721	Ruddy Turnstone	1	G	to 40'	- CALLING	
0723	R.-T. Tropic	1	-	80'	Collected - P.W.W.	
0724	Wedgetail	2	G	low	circling downed TROPICBIRD	
0740	Shear-Pet.	1	S	"		
0741	Ruddy Turnstone	1	SW	"	DISTANT	
0810	Pterodroma	1	NNW	"	Collected - P.W.W.	
0813	Wedgetail	1	NW	"		
0816	"	1	G	"		
0820	Pterodroma	1	SE	"		
F 0825	Wedgetail	40-25			Very spread out; no feeding	
	G. Frigate	1			Adult ♀ Collected - R.W.M. & KA	
	Sooty Tern	2				
+	Sooty Shear	1	SE	to 20'		
	Pterodroma	1	E	low		
	Wedgetail	1			Collected - R.W. McMill - part of flock of 0825	
+	W.T. Tropic	1	E	50'		
	Wedgetail	4	G	low	1 collected - R.W. M.	
	Wedgetail	1	S	"		
	Wedgetail	1	S	"		
	"	1	S	"		
	"	1	S	"		
	"	1	ESE	"		
	"	2	SW	"		
+	Sooty Shear	3	S	low		
	(Bonin Is) Pet	1	NNW	low		
	Sooty Shear	4	SSI	low		
	Wedgetail	1	N	low		
	Sooty Shear	1	S	low		



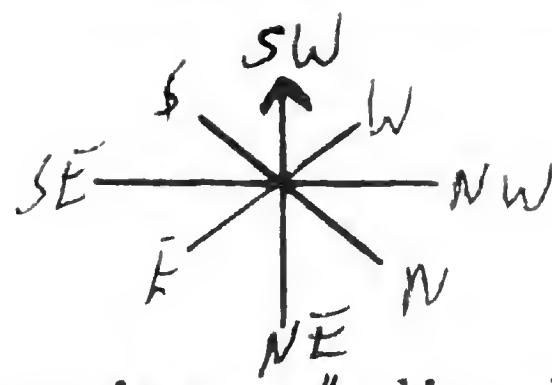
DATE 12 Sept. 1964
Pg. # 2

time	species	#	dir.	hgt.	remarks	loc.
10 43	Sooty Shear.	2	SW	Low		
10 48	Bonin Is. Pet.	1	S	"		
10 50	wedge-tail sh.	1	N	"		
10 50	" "	1	S	"		
10 53	Bonin Is. Pet.	1	S	Low		
11 00	Shear-Pet.	1	N	Low		
F 11 04	Sooty Shear	7	VS	Low	- not feeding	
11 07	Sooty Shear	1	VS	Low		
11 12	Wedge-tail	1	NNW	Low		
11 20	Red T. Tropic	1	SSW	70'		
11 23	Pterodroma	1	S	Low		
11 23	"	1	N	Low		
11 23	Sooty Shear	2	VS	Low		
11 26	Pterodroma	1	S	"		
11 32	Shear-Pet	1	N	Low		
11 35	Sooty Shear	1	VS	Low		
F 11 45	Sooty Tern	11	NE	30'	not feeding	
F 11 55	Sooty Shear	7	S	Low		
12 01	Bulwer's Pet	1	NNW	Low		
F 12 15	Sooty TERN	175 ± 25			Flock split & went SE & NW	
	wedge-tail sh.	75 ± 10			Sooty Terns were low to 80-100'	
	Pterodroma	10			wedge-tails all low and feeding - some were	
	Pterodroma				sitting on the water.	
					A number of Pterodromas were seen - one	
					was collected. Flying Fish underneath.	
12 55	Ruddy Turnstone	1	N	Low	- stayed with the ship for 3 circles	
13 00	Pterodroma	1	NE	Low		
13 45	Sooty Tern (imm)	2	NE	60'	- identical to the one collected 12 15, cheeped	
13 55	Shear-Pet	1	S	Low		
14 08	Sooty Tern	6	NE	0-60'		
14 08	Fairy Tern	1	NE	Low		
14 08	Pterodroma	1	E	Low	Probably white-necked Pet.	
14 13	wedge-tail sh.	1	N	Low		
14 37	Sooty Shear.	23	SW	Low	if it's a flock it's pretty broken up	
14 37	Wedge-tail sh.	1	NW	Low		



DATE 12 Sept - 1964
Pg. # 3

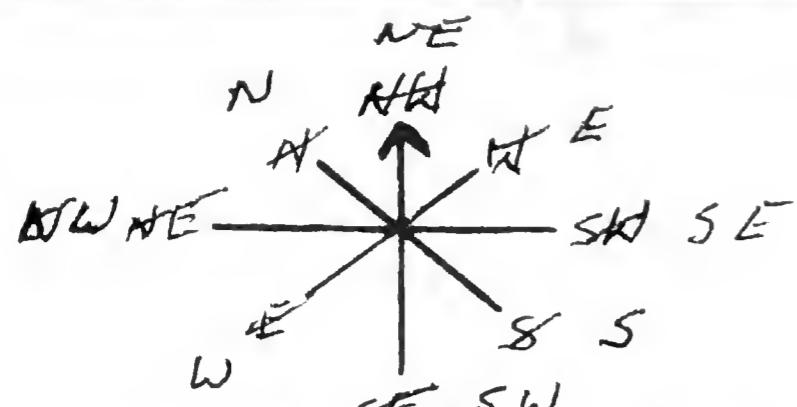
time	species	#	dir.	hgt.	remarks	loc.
F 1440	Sooty Shearwater	2530	SW	Low	traveling fast probably not feeding	
1445	Bulwer's Pet.	1	S	Low		
1500	Pterodroma	1	S	Low		
1500	Sooty Shear	1	S	Low		
1510	" "	1	S	"		
1522	Bulwers	1	S	"		
1525	W.N. Petrel	1	SE	"		
1528	Sooty Shear	1	S	"		
1534	" "	7	S	"		
1540	Wedgetail	1	NW	"		
1542	Sooty Shear	18±3	5	"		
1600	"	1	S	Low.		
F 1608	"	22	SSE	Low	not Feeding	
1608	"					
F 1612	Sooty Tern	21	NNE	50'	not feeding	
1612	Sooty Shear	1	SSE	Low		
1619	Shear-Pet	1	SSE	Low	New Zealand Shearwater? easy gliding flight gray back white underneath however very poor flight. PwW	
1627	Sooty Shear	1	SSE	Low		
1629	"	1	SSE	Low		
1630	Wedgetail	1	NNW	Low		
1653	Sooty Shear	1	SSE	Low		
F 1655	S " "	7	SSE	Low		
P 1656	"	10	"	"		
1682	Sooty Tern	1	SSW	60'		
1689	R-T Tropic	1	SE	60'		
1706	Wedgetail	3	NW	low		
1707	"	2	SSE	"		
F 1708	Sooty shear	10	"	"		
1710	Wedgetail	2	"	"		
1712	Shear Pet	1	SSE	"		
F 1728	Sooty Tern	6	On	Low	Immature	
	Wedgetail	2	On			
1730	Sooty Sh	1	SSE	Low		
1740	"	2	SSE	Low		
1740	Sooty Tern	2	NE	Low	appeared to be feeding	
1740	Wedgetail	1	NE	Low		



DATE 12 Sept 1964
Pg. # 4

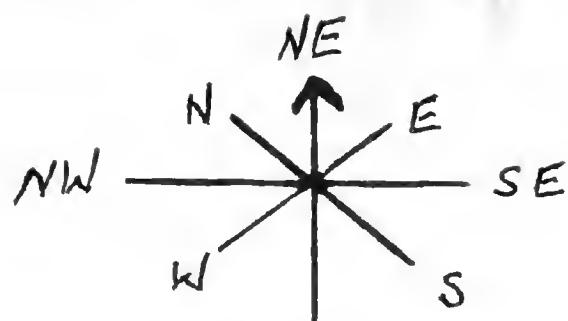
time	species	#	dir.	hgt.	remarks	loc.
6-10	1745 Sooty Shear	1	SSE	Low		
	1757 "	1	SSE	Low		
	1751 "	1	SSE	Low		
✓	1755 Com. Noddy	1	NNW	50'		
	1756 Sooty Shear	1	SSE	Low		
3-3	1757 Wedgetail	1	S	Low		
✓	1759 P. Tern Droma	1	SE	Low		
	1800 Wedgetail	1	SE	"		
✓	1804 Sooty tern	3	"	"		
	1813 Wedgetail	1	SSE	"		
++	1824 Bulwer's	1	SSE	"	appeared together; Bulwers landed on water, Bonin circled it for ~ 30 sec, then both flew off SSE, the Bonin 1/3 again as fast.	
++	1824 Bonin Is.	1	"	"		
++	1824 Sooty shear	1	"	"		
1836	1833 "	1	"	"		
	1841 Sooty tern	2	"	"	SUNSET	
	1936 Shear Pet	1	NE	"		
	2057 "	1	O	"		
	2145 Bind	1	NE	60'		
2300					Change course to NW	
2455 2057 Bind		1				





DATE 13 SEPT 61
Pg. # 1

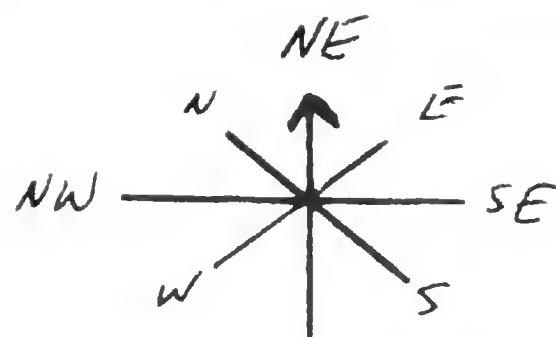
time	species	#	dir.	hgt.	remarks	loc.
0035	TROPICBIRD	1	N	50'		
0045	SHEAR-PET.	1	NW	30'		
0120	BIRD	1	SW	LOW	FLEW DIRECTLY INTO SIDE OF SHIP BUT COULD NOT FIND ABOARD!	
0157	WEDGETAIL	1	NE	LOW	NEAR SIZE OF BOOBY, DARK ABOVE, FAIRLY RAPID WING BEATS. IMM BOOBY?	
0158	TROPICBIRD	1	SW	80'	Flew AT LIGHT AS BIRD ABOVE. BIRD ABOVE NOW THOUGHT TO BE WT!	
0220	SMALL PTERODROMA	1	SW	LOW		
ca 0400	---	1	SW	LOW	- AS LOW OVER H2O AS USUALLY SEEN DIURNALLY.	
0400	BIRD	1	SW	High	- COURSE CHANGE TO NE About 30' ABOVE SHIP RADAR	
0404	Bird	1	NW	LOW		
0510	Wedgetail sh	1	SE	LOW	Probably a Wedgetail	
0615	Sooty Shear	1	SE	"		
0620	" "	3	SE	"		
0621	" "	1	SE	"		
0622	" "	1	SE	"		
0624	---	1	SE	"		
					SUNRISE	
0625	Sooty Shear	5	SE	"		
0625	R.T. Tropic	1	NW	40'		
0625	---	1	---	---	Morning Station	
0640	Wedgetail	2	S	LOW		
0655	Sooty Tern	1	SE	20'	circled near ship for 7 min. together	
0658	" "	1	S	LOW		
0701	Wedgetail	1	SE	LOW		
0705	R.T. Tropic	1	SE	50'	COLLECTED KA; probably same as 0625	
0712	" "	1	SE	50'	" "	
0718	Wedgetail	3	SE	LOW		
0725	---	1	SE	---		
0744	Wedgetail	1	SE	LOW	UNDERWAY	
0749	"	1	S	"		
0754	Sooty Tern	1	SSW	30'		
0800	Sooty Shear	1	S	LOW		
0807	PTERODROMA	2	SW	LOW		
0807	WEDGETAIL	1	NW	"		
0808	SOOTY SHEAR	2	SE	"		
0810	SOOTY TERN	1	NW	20'		
0853	BONIN TYPE	1	SW	LOW		
0835	W.-N. Petrel	1	SE	"		
0840	SOOTY TERN	3	S	"		
0840	BONIN TYPE	1	SW	"	1-1MM.	



DATE 13 SEPT 64
Pg. # 2

time	species	#	dir.	hgt.	remarks	loc.
0845	PTERODROMA	1	NE	LOW		
0846	SOOTY SHEAR	1	SE	"		
0850	" "	8	SE	"		
0851	" "	2	"	"		
0855	" "	2	"	"		
0857	" "	1	"	"		
0859	" "	1	"	"		
0902	" "	4	"	"		
0909	" "	1	"	"		
0913	WEDGE-TAIL	1	W	"		
0915	"	1	SW	"		
0917	SOOTY SHEAR	1	S-SE	"		
0921	SHEAR. PET.	1	"	"		
0928	FAIRY TERN	1	NE	30'		
0929	BONIN TYPE	1	NW	LOW		
0930	SOOTY SHEAR	1	SSE	"		
0932	SOOTY TERN	1	SW	"		
0934	" "	1	SE	"		
0936	" "	1	"	"		
0945	FAIRY TERN	1	NE	"		
0949	SOOTY SHEAR	1	S-SE	"		
1000	" "	2	"	"		
1019	Red-Tail Tropic	1	SE	100'		
1030	Wedge-Tail Sh.	1	S	LOW		
1032	Sooty Shear.	1	S	LOW		
1043	Wedge-Tail Sh.	1	SW	LOW		
1055	" "	1	S-SW	LOW		
1059	Sooty Tern	2	NE	LOW		
1110	DARK RUMPT.?	1	N	LOW		
1125	Sooty Shear.	1	N	LOW	Sitting on water	
1130	" "	2	SE	LOW		
1151	" "	5	S	LOW	Get off water	
1201	" "	1	S	LOW		
1215	" "	1	SE	"		
1220	Bulwer's	1	SW	"		
1223	Sooty shear	1	S	"		
1236	" "	1	SSE	"		
1238	Sooty tern	1	N	15'		

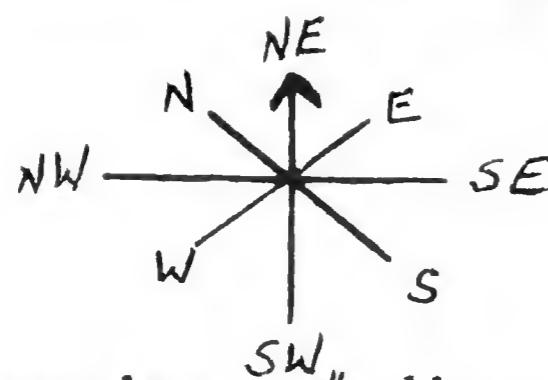
7/11/14



DATE 13 Sept 64
Pg. # 3

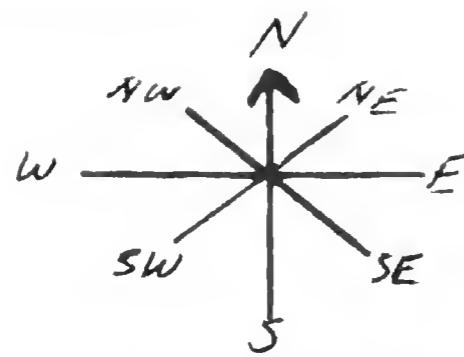
time	species	#	dir.	hgt.	remarks	loc.
1245	Sooty shear	5	SSE	low		
1247	"	2	"	"		
1250	"	6	"	"		
1252	Wedgetail	1	"	"		
1255	Sooty tern	2	SE	"		
1256	Sooty shear	1	SSE	"		
1257	Shear - Pet	1	"	"		
1301	Sooty shear	1	"	"		
1306	"	3	"	"		
1308	"	1	"	"		
1327	"	1	"	"		
1335	"	1	"	"		
1337	"	1	"	"		
1345	Bonin ls	1	SW	"		
1355	Wedgetail	1	SE	"		
1427	SOOTY SHEAR	1	S-SE	"		
1428	" "	2	"	"		
1444	" "	1	"	"		
1520	D.-r. Petrel	1	SE	"		
1525	SOOTY SHEAR	1	S-SE	"		
1545	" "	1	"	"		
1551	Bulwer's	1	NW	"		
1553	SOOTY SHEAR	1	S-SE	"		
1554	" "	2	②	"		
1556	SOOTY TERN	4	SE	"		
1607	Sooty shear	1	SE	"		
1610	Wedgetail	1	SE	"		
1614	Sooty Shear	1	S	"		
1615	" "	2	SW	"		
1620	" "	6	S	"		
1626	" "	1	S	"		
1628	Wedgetail(?)	1	SSW	"		
1633	Sooty Tern	1	S	"		
1654	R.T. Tropic	1	SE	?		
1655	Sooty Shear	1	S	low		
1703	" "	1	SE	"		
1709	" "	1	"	"		
1713	" "	1	S-SE	"		

got up off water



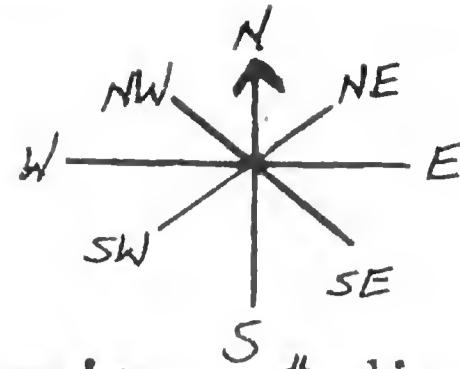
DATE 13 SEPT 64
Pg. # 4

time	species	#	dir.	hgt.	remarks	loc.
1725	SOOTY SHEAR	3	S-SE	LOW		
1725	"	1	"	"		
1725	"	1	"	"		
1725	"	3	"	"		
1725	WEDGE-TAIL	1	SW	"		
1728	SOOTY SHEAR	4	S-SE	"		
1729	"	1	"	"		
1730	"	1	"	"		
1736	"	1	"	"		
1739	"	1	"	"		
1739	"	1	"	"		
1739	BULWER'S	1	NW	"		
1742	SOOTY SHEAR	2	S-SE	"		
1745	"	1	"	"		
1747	"	1	"	"		
1747	"	1	"	"		
1747	"	3	"	"		
1750	"	1	"	"		
1750	"	1	"	"		
1755	"	1	"	"		
1800	"	1	"	"		
1806	"	1	S-SE	Low		
1807	"	1	"	"		
1810	11	1	"	"		
1813	11	1	"	"		
1819	11	1	"	"		
1827	11	1	"	"		
1834					Sunset	
2000	Shear-Pet	1	NE	Low		
2007	Bird	1	SE	70'	probably Tropicbird	
2315	Bird	1	NW	low	probably Shear-Pet	



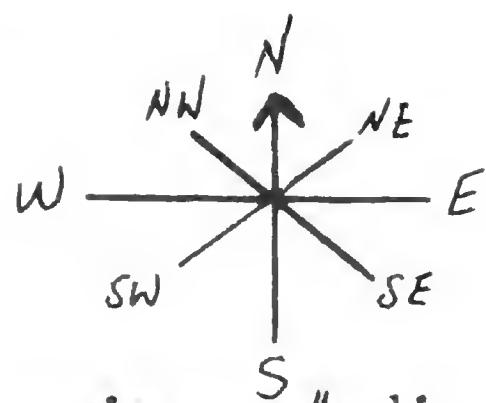
DATE 14 Sept 1964
Pg. # 1

time	species	#	dir.	hgt.	remarks	loc.
0158	BIRD	1	NE	Low	probably wedge tail sh.	
0200					Course changed to a heading of N <u>LEAVE GRID</u>	
0230	BIRD	1	N	Low		
0235	Wedge tail sh.	5	NE	Low	2 came along port side and were calling to each other. Then another joined them all looked over the ship. Then 2 more came past. One of the last 2 changed direction when it was directly opp. the port life boat and came to the ship. It crashed into the life boat. When I got down to pick it up it was running around the deck. I brought it to the flying bridge and looked at it. Then released it. -light phase -no broad patch. Was released it. -light phase -no broad patch. Was no broken bones or anything. No band. Δ	
0245	Tropic bird	1-2			There's one or two about because I've been hearing them call for the past 2-3 min. Δ	
0247	Wedge tail sh	1	N	Low		
0249	BIRD	1	NE	40'	Came right for the ship about 5 or 10' above the Flying bridge. About the same size as a wedge tail and very similar in all respects. Light underneath with grey edges of wings tail and sides of neck. Wing bands were neither like a tropic bird. Came in at this height - did not come up from the surface. The light wing flashed just before it hit the radar most probably swerved and went west as it had come. That is the reason I could tell the grey band and size. It made no noise. Δ	
0255	Wedge tail sh	1	E	Low	Came in about 2 feet off water heading straight for ship. Starboard side of ship about 10 feet port side of bridge and swerved but appeared that it couldn't get around it and dropped into the sea about 5 feet to port and paddled away from ship. Δ	
0325	TROPIC BIRD	1	E	70'	CALLING & FOLLOWING.	
0336	"	1	E	"		
0400	FAIRY TERN	1	N	"		
0410	WEDGE TAIL	1	N	TO 60'	- SPREAD TAIL & called near flying BRIDGE	
0415	TROPIC BIRD	1	E	TO 40'		



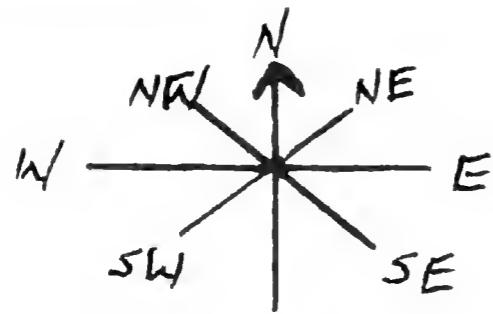
DATE 14 SEPT 61
Pg. # 28

time	species	#	dir.	hgt.	remarks	loc.
0315	shear-pet TROPICBIRD OR F.TERN	1	S	low	seen by AAA of watch	
0435	SOOTY TERN	1	NE	20'	-	
0515	TERN	1	N	30'	-FOLLOWING	
"	"	1	"	"		
0530	R.-T. TROPIC	1	E	low	- Flew into ship, bounced off into Bow-WAVE,	
0540	BIRD	1	S	"	ROSE OVER FANTAIL, DEPARTED AFT.	
0542	SOOTY TERN	1	-	-		
0600	WEDGE-TAIL	1	S	low	CALLING.	
0605	"	1	S	"		
0618	"	1	E	"		
0620	"	3	O	"		
0622	Bonin Is.	1	S	"	-	
SUNRISE					Stop for morning station.	
0623	Sooty shear	2	SE	"		
0627	"	1	"	"		
0630	Wedgetail	5	ESE	low		
0630	"	1	SSE	low		
0630	Pterodroma	1	SSE	low		
0631	"	1	"	"		
0631	Wedgetail	1	SE	"		
0632	Sooty shear	1	SSE	"		
0633	"	1	"	"		
0651	Wedgetail	1	SE	"		
0655	"	1	SE	"		
0702	"	1	"	"		
0705	- - -	- - -	- - -	- - -	- - - regain momentum as before, overcoming inertia.	
0709	Wedgetail	1	"	"		
0715	Sooty shear	1	SSE	"		
0716	"	1	"	"		
0718	Wedgetail	2	SE	"		
0719	Sooty tern	2	SSE	10'		
0721	Sooty shear	1	"	low		
0723	Wedgetail	1	SE	"		
0725	Sooty shear	1	SSE	"		
0735	Wedgetail	1	"	"		
0738	"	1	SE	"		
0738	"	1	"	"		



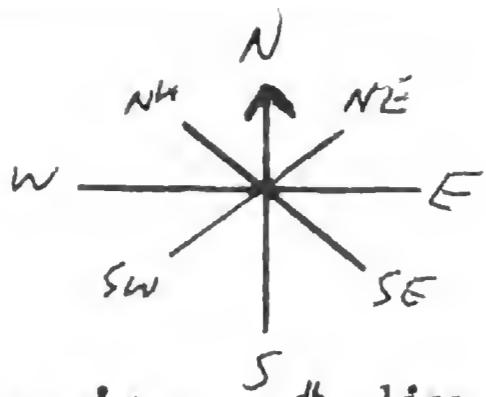
DATE 14 Sept 64
Pg. # 3

time	species	#	dir.	hgt.	remarks	loc.
0744	Sooty Shear	1	SSE	low		
0752	"	1	"	"		
0753	Wedgetail	1	N	"		
0756	"	1	S	"		
0756	"	1	"	"		
0759	Sooty Shear	1	SSE	"		
0808	Dark Rump	1	S	"		
0821	Shear-Pet	1	WNW	"		
0836	Sooty Shear	1	S	"		
0836	Wedgetail	1	S	"		
0842	Sooty Shear	1	ESE	"		
0846	Wedgetail	1	NNE	"		
0855	Sooty Shear	2	SE	"		
0859	Wedgetail	1	E	"		
0909	"	1	E	"		
0915	Bonin Is.	2	SW	"		
0919	Wedgetail	1	SE	"		
0920	Sooty Shear	1	S	"		
0920	Bonin Is.	1	S	"		
0920	Sooty Shear	1	S	"		
0929	Bulwer	1	NW	"		
0929	Wedgetail	1	S	"		
0935	Sooty Shear	4	SE	"		
0937	Christmas Is	1	-	H20		
0937	Wedgetail	1	N	1w		
0937	W.N. Petrel	1	N	1w	Orange tag	
0951	Pterodroma	1	S	"		
0955	"	1	N	"	Wh Non D-R	
0955	R.T.-Tropic	1	?	to 80	got up off H20? May have been 2 birds	
1005	WEDGE-TAIL	1	SE	low		
1010	"	1	?	"		
1013	SOOTY SHEAR	1	S	"		
1016	W.-N. PETREL	1	N	"		
1018	SOOTY SHEAR	1	S	"		
1025	SOOTY TERN	2	SE	"		



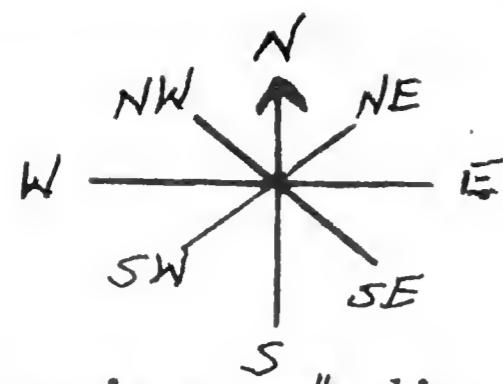
DATE 14 SEPT 64
Pg. # 4

time	species	#	dir.	hgt.	remarks	loc.
6-213	SOOTY SHEAR	1	S	LOW		
1051	" "	5	S-SE	"		
1111	" "	3	"	"		
1114	" "	2	"	"		
1115	W-N. PETREL	1	NW	"		
13-225	WEDGE-TAIL	2	SE	"		
1130	"	1	S	"		
1137	"	2	SE	"		
1146	"	1	E	"		
1154	SOOTY SHEAR	1	S	"		
1156	SOOTY TERN	1	NE	"		
1157	" "	2	N	"	1-imm	
1158	" "	3	E	"		
1159	" "	1	E	"		
1200	WEDGE-TAIL	1	N	"		
1207	"	1	S	"		
1228	Shear-Pet	1	S	"	distant	
1230	SOOTY TERN	2	SE	"		
1232	Wedge-tail	6	E	"	at least 3 on water	
1235	"	8	E	"	most on water; joined above	
1305	W-T. Tropic	1	N	50'	collected - PWL	
1315	Bulwers	1	S	low		
F 1320	SOOTY TERN	14	ENE	low	Moving toward flock on horizon	
	Wedge-tail	3	E	low	Not feeding flock	
1320	Tern	250			on horizon	
1336	SOOTY TERN	4	N?	10-20'	3 together ? No flock	
1336	Wedge-tail	1	N?	low		
1348	"	1	NNE	"		
1405	BULWER'S	1	NNE	"		
1409	"	1	"	"	joined 1405	
1420	R-T Tropic	1	"	60'		
1433	SOOTY TERN	2	E	20'		
1438	Bulwers	1	NNW	low		
1439	SOOTY TERN	2	"	"		
1447	Bulwers	1	"	"		
1454	Wedge-tail	1	N	"		
1514	Bulwers	1	NNW	"		
1515	SOOTY SHEAR	2	SSE	"		



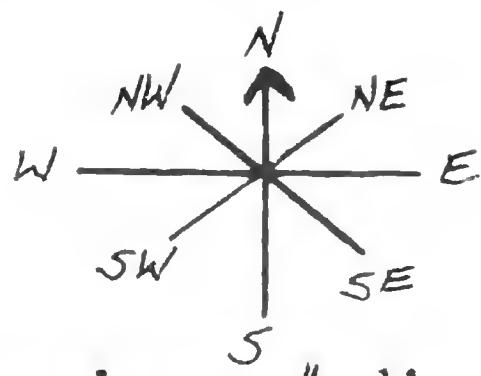
DATE 14 Sept 64
Pg. # 5

time	species	#	dir.	hgt.	remarks	loc.
14-90						
F 1532	Sooty shear	14	SSE	low		
1534	Wedgetail	1	NW	"		
1542	Bonin Is.	1	S	"		
F 1544	Sooty shear	16	SSE	"		F - 61 32 0
1549	Wedgetail	1	"	"		1F - 61 00 0
1552	Bulwer's	1	S	"		
1612	Bonin Is	2	N	low		
1614	Sooty shear	1	SSE	low		
1622	"	1	SSE	low		
1630	Bonin Is	1	W	low		
F 1640	Sooty shear	18	SSE	low	not feeding	
1641	Wedgetail	1	E	low		
1646	Bulwer's	1	W	low		
F 1800	Sooty shear	15	SSE	low		
1700 Sooty						
1700 Sooty Tern	1		ESE	40'		
F 1703	Sooty shear	14	SSE	low		
1711	"	3	"	"		
1713	"	1	"	"		
1719	Pterodroma	1	N	low		
F 1722	Sooty shear	5	SSE	low		
1722	"	1	SSE	low		
1724	Bonin Is P	1	S	low		
1730	Bonin Is	1	SSE	low		
1731	W-T Tropic	1	N	60'	adult	
1731	Bulwer's	1	N	low		
1732	Bulwer's	1	N	low		
1829	Bulwer's	1	N	low		
1830	R-T Tropic	1	N	low		
1834	Wedgetail	1	N	70'		
1835					summit.	



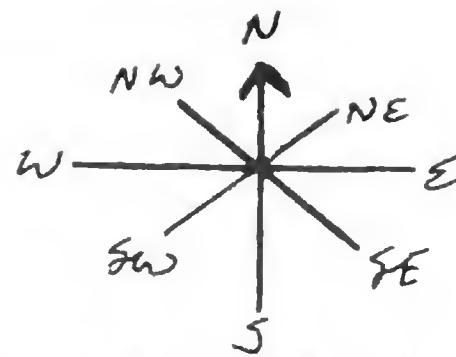
DATE 15 SEPT 64
Pg. # 1

time	species	#	dir.	hgt.	remarks	loc.
CA 0610	---	-	-	-	SUNRISE	
0615	SOOTY SHEAR	2	S-SE	LOW		
0620	WEDGETAIL	1	"	"		
0623	"	3	N	"		
0630	"	2	NE	"		
0630	"	1	N	"		
0632	"	2	"	"		
F 0634	SOOTY SHEAR	5	S	"		
F 0635	" "	7	"	"		
0636	" "	2	"	"		
0646	" "	3	"	"		
0646	SHEAR-PET.	1	"	"		
0646	WEDGETAIL	1	"	"		
0654	"	1	S	"		
0656	SOOTY SHEAR	3	"	"		
0658	WEDGETAIL	1	"	"		
0700	"	2	E	"		
F 0703	SOOTY SHEAR	8	S	"		
0705	Wedgetail	1	"	"		
0705	"	2	"	"		
0706	"	1	"	"		
0706	"	2	"	"		
0707	"	1	"	"		
0708	"	2	"	"		
0713	"	1	"	"		
0714	"	1	"	"		
0714	"	1	"	"		
0715	"	1	"	"		
0718	"	3	"	"		
0721	SOOTY TERN	1	S	"		
0722	WEDGETAIL	2	SE	"		
0722	"	1	S	"		
0725	"	3	"	"		
0725	"	1	"	"		
F 0725	SOOTY SHEAR	15	S	"		
0735	" "	3	"	"		
0735	WEDGETAIL	2	"	"		
0736	"	1	"	"		
0738	"	1	"	"		
0745	SOOTY TERN	2	"	"		
0747	WEDGETAIL	1	S	"		
0752	"	2	"	"		
0752	SOOTY SHEAR	4	S	"		
0752	SOOTY TERN	1	"	"		
F 0754	SOOTY SHEAR	8	"	"		
0756	" "	3	"	"		



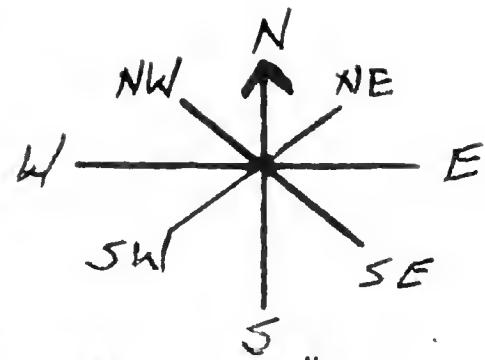
DATE 15 SEPT 64
Pg. # 2

time	species	#	dir.	hgt.	remarks	loc.
0800	SOOTY SHEAR	48±5	5-5W	low		
F 0800	" "	18	"	"		
0805	Sooty Tern	1	SW	"		
0805	Wedge-tail	1	SW	"		
0805	Sooty Tern	1	S	"		
0807	Bulwer's	1	E	low		
0812	Wedge-tail	1	SW	"		
F 0812	Sooty Shear	5	SE	"		
0820	Wedge-tail	1	SSW	"		
F 0820	Sooty Shear	10	SW	"		
0824	"	3	SE	low		
0824	Wedge-tail	1	SW	low		
F 0839	Sooty Shear	17	SSW	"		
0841	Bulwers	1	NNW	"		
0845	Bulwers	1	N	low		
0847	Wedge-tail	1	SW	low		
0850	"	1	SW	"		
0850	"	1	SW	"		
0854	"	1	S	"		
0859	"	1	SW	"		
0859	"	1	SE	"		
0901	Bonin Is.	1	N	"		
0903	Wedge-tail	1	SSW	"		
0906	Bulwers	1	SE	"		
F 0918	Sooty Shear	70±5	SE	"		
F 0922	" "	60±5	SSW	"		
F 0925	" "	18±2	SW	"		
F 0932	" "	60±5	SE	"		
F 0933	Sooty Tern	75±5	N	high	Perhaps feeding - distant	
F 0935	Sooty Shear	50±5	SE	low		
F 0935	Sooty Tern	10±1	Ø	low		
	Wedge-tail	4-5	Ø		Not feeding	
F 0939	Sooty Shear	33±2	S	low		
F 0945	" "	25	SE	"		
F 0945	" "	6	SE	"		
0947	Sooty Tern	2	N	"		
F 0950	Sooty Shear	45±5	SE	"		



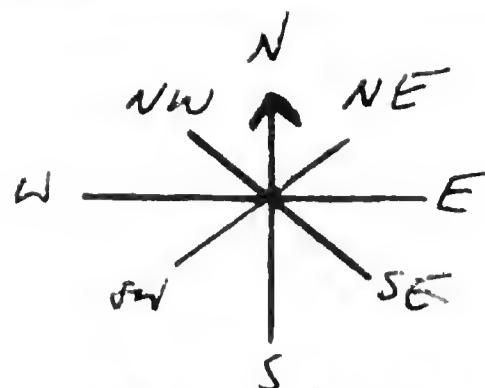
DATE 15 Sept 64
Pg. # 3

time	species	#	dir.	hgt.	remarks	loc.
62130	SOOTY SHEAR	1	SW	low		
F 0956	" "	45±2 SW		"		758°
1002	WEDGE-TAIL	1	N	"		F - 8 - 0
1006	BONIN Is	1	N	"		FF
1007	SOOTY TERN	100±10		"	25±5 imm	
1	WEDGE-TAIL	75±5	Q	TO 60'	Not Feeding	
1016						
1021	WEDGE-TAIL	5	N	LOW	SCATTERED	
1026	"	2	NW	"		
F 1030	SOOTY TERN	200±20		"	40±10 imm	
1	FRIGATE	2	>E	TO 200'		
1032	WEDGE-TAIL	75±10		"	SOME SITTING ON H ₂ O - NOTHING SEEN TO FEED.	
1037	SOOTY SHEAR	23±3	S	LOW		
1040	WEDGE-TAIL	3	N	"		
F 1045	SOOTY TERN	60±10		TO 150'	Not Feeding	
	WEDGE-TAIL	20±5	E			
1050	SOOTY TERN	5	SE	LOW		
1051	WEDGE-TAIL	2	N	"		
F 1052	SOOTY SHEAR	24	S	"		
1054	SOOTY TERN	2	N	10'		
1054	WEDGE-TAIL	2	N	LOW		
1054	BONIN Is	2	N	LOW		
F 1100	SOOTY TERN	60±8	E	TO 200'	Not Feeding	
1104	WEDGE-TAIL	1	W	LOW		
F 1110	SOOTY TERN	45±5	E	TO 80'		
	WEDGE-TAIL	45±5				
1115	WEDGE-TAIL	3	Q	LOW	15 Wedgetails sitting on WATER IN GROUP.	
1115	Pterodroma	2	N	"	- NEAR RAIN SQUALL	
1117	W-N. Petrel	1	SE	LOW		
1118	SOOTY SHEAR	30±5	S	LOW		
1124	SOOTY TERN	2	S	"		
1125	" "	3	SE	"		
F 1126	SOOTY SHEAR	7	S	"		
1133	BONIN Is.	1	N	"		
1136	Bulwer's	1	S	"		
1138	"	1	E	"		
1140	"	1	N	"		
1140	X-MAS Is.	1	S	"		



DATE 15 SEPT 64
Pg. # 4

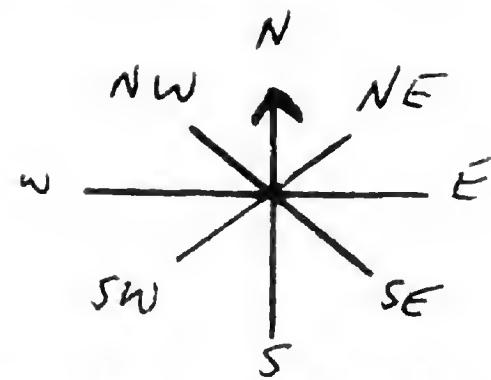
time	species	#	dir.	hgt.	remarks	loc.
1200	SOOTY SHEAR	60± 10	S	low		
1201	" "	90± 15	S	"		
1202	" "	80± 10	S	"		
1203	" "	8	S	"		
1204	" "	18	S	"		
1205	WEDGETAIL	1	S	"		
1206	SOOTY SHEAR	60±5	S	"		
1207	" "	45±5	S	"		
1208	BONIN Is	1	N	"		
1209	"	2	S	"		
1210	SOOTY Shear	65±5	S	low		
1211	SOOTY Tern	1	SE	10'		
1212	SOOTY Shear	65±5	S	low		
1213	SOOTY Tern	90±10	○	low	not feeding	
1214	Bulwer's	1	S	low		
1215	W-n Petrel	1	N	low		
1216	SOOTY Tern	65±5	E	60'	not Feeding	
1217	Wedge-tail	25±5	E	low		
1218	SOOTY Shear	40	S	low		
1219	Wedge-tail	3	S	low		
1220	SOOTY Tern	1	SE	low		
1221	Wedge-tail	1	SE	low		
1222	Bulwer's P	1	N	low		
1223	SOOTY Tern	1	S	20'		
1224	Wedge-tail	1	S	low		
1225	Bulwer's	2	-	H2O	one collected RM	
1226	W-n Petrel	1	ENE	low		
1227	SOOTY Tern	1	EN	60'	collected RM	
1228	SOOTY Shear	1	S	low	collected RM	
1229	Wedge-tail	2	SSE	low		
1230	SOOTY Tern	20	○	70'		
1231	Wedge-tail	2	○	low	not feeding	
1232	Bulwer's	1	N	low		
1233	SOOTY Shear	1	SE	low		
1234	Wedge-tail	2	SE	low		
1235	"	1	SW	"		
1236	Bulwer's	1	N	"		



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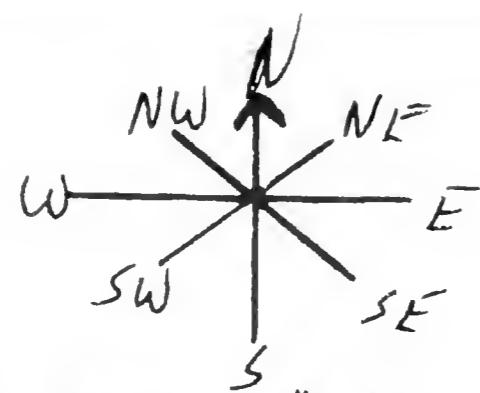
time	species	#	dir.	hgt.	remarks	loc.
23-52	1409	Wedge-tail	1	S	low	
3-86	1412	"	1	N	"	
F	1416	Sooty Tern	40	SW	distant; unable to tell whether Wedgetail, present. None seen feeding	
5-11	1417	Wedge-tail	1	S	low	
3-85	1420	Sooty shear	1	VS	"	
F	1422	"	2	"/"	"	
3-85	1423	Wedge-tail	1	"	"	
F	1425	Bulwer's	1	N	"	
F	1426	Sooty Tern	45	SW	F - 2 - 110°	
		Wedge-tail	25		FF - 0 - 0°	
	1436	"	1	S	"	
	1442	"	1	SE	"	
	1444	"	1	E	"	
	1446	"	1	S	"	
	1451	"	1	S	"	
	1453	Sooty Shear	1	VSSE	"	
	1455	"	1	"/"	"	
	1457	Wedge-tail	2	"	"	
	1458	Sooty shear	6	"/"	"	
	1469	Wedge-tail	1	S	"	
	1506	Wedge-tail	1	SE	low	
	1506	Bulwer's	3	W	"	Arose from water
	1507	Wedge-tail	1	SE	"	
	1508	"	2	"	"	
	1510	"	2	"	"	
	1512	Bulwer's	1	E	"	
	1524	Wedge-tail	1	"	"	
	1526	"	3	SSE	"	
	1527	"	1	"	"	
	1528	"	1	S	"	
	1528	Sooty Tern	1	S	"	
	1529	Pterodroma	1	S	"	
	1530	Wedge-tail	1	"	"	
	1530	"	1	"	"	
	1531	"	1	"	"	

1 WFT collected by R.F.



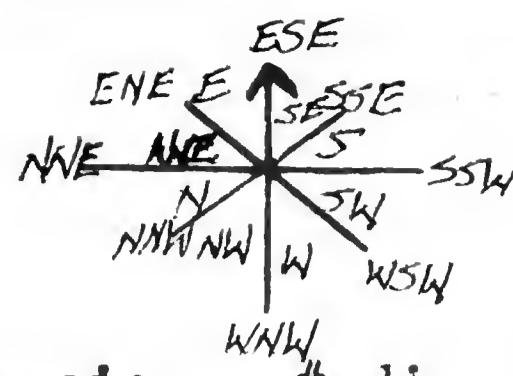
DATE 15 Sept 64
Pg. # 6

time	species	#	dir.	hgt.	remarks	loc.
1516	Wedgetail	1	SSE	low		
1535	"	1	"	"		
1525	Bulwer's	1	E	"		
1537	Wedgetail	1	SSE	"		
1539	"	1	"	"		
1543	Bulwer's	3	E	"		
1543	Wedgetail	2	SSE	"		
1544	Pterodroma	1	SE	"		
1549	Wedgetail	1	S	"		
1550	"	1	"	"		
1552	"	2	"	"		
1554	"	1	"	"		
5-64	Sooty tern	1	SE	10'		
1536	"	1	"	"		
1556	Wedgetail	1	SSW	low		
1557	Sooty tern	1	SSE	10'		
1558	Wedgetail	3	S	low		
3-29	SOOTY SHEAR	3	S	"		
1607	WEDGE-TAIL	2	S	"		
1610	"	3	S	"		
1612	"	1	S	"		
1621	Bulwer's	1	SE	"		
1622	"	1	N	"		
1626	SOOTY SHEAR	1	S	"		
FF	1630	SOOTY TERN	GOT 10	"	FEEDING, - immatures in flock - 15±5	
		WEDGE-TAIL	50±10	0		
1640	BULWER'S	1	S	"		
1645	SOOTY TERN	1	S	"		
1645	BULWER'S	1	N	"		
1651	Wedgetail	1	S	low		
1701	Bulwer's	1	S	low		
1704	Bonin Is P	1	N	low		
1706	Wedgetail	1	SE	low		
F	1713	SOOTY SHEAR	25	SE	low	
	1714	Wedgetail	1	S	low	
	1716	"	2	S	low	
	1716	Bulwer's	2	S	low	
	1716	Bonin Is	1	N	low	



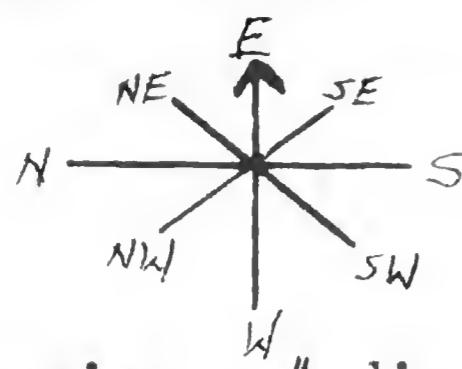
DATE 15 Sept 1964
Pg. # 7

time	species	#	dir.	hgt.	remarks	loc.
1714	WedgeTail	2	S	Low		
1728	11	2	S	Low		
1721	Sooty Tern	5	S	low	not feeding	
1723	Bonin Is	1	N	Low		
1723	WedgeTail	1	S	Low		
1725	Sooty Shear	1	SW	Low		
1725	WedgeTail	2	S	Low		
1730	Bulwer's P	1	S	Low		
1736	WedgeTail	1	S	Low		
1740	SOOTY SHEAR	10	S	"		
1742	WEDGE TAIL	1	S	"		
1745	"	1	S	"		
1747	"	1	S	"		
1747	SOOTY TERN	1	S	"		
1752	WedgeTail	1	S	"		
1752	Sooty Tern	1	S	"		
1752	WedgeTail	1	S	"		
1753	Bonin	1	S	"		
1755	Sooty Tern	1	SE	"		
1802	Bonin	1	N	"		
F	Bulwers	1	N	"		
1807	Sooty Shear	50±10	S	"		
1810	" "	1	S	"		
1810	Bulwer's	1	N	"		
1824	WedgeTail	1	N	"		
1830	—	—	—	—	APPARENT SUNSET	



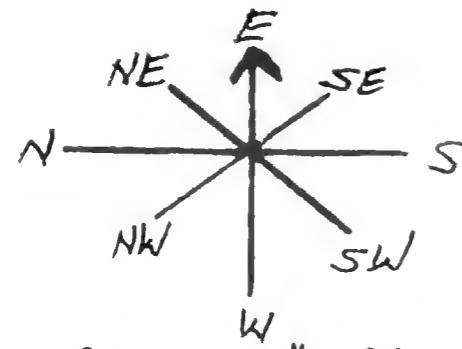
DATE 26 SEPT 64
Pg. # 1

time	species	#	dir.	hgt.	remarks	loc.
0830	— LEAVE LAYSAN ISLAND				HEADING DUE SOUTH. LAYSAN DUE EAST OF SHIP.	
	Birds in Area — Fairy Tern, Frigates, Bonin Is., Sooty Terns, Wedgetails, Masked Booby, Brigates in Column over Laysan, Sooties just visible, with glasses.					
0905	— — —	—	—	—	ON COURSE - COMMENCE OBSERVATIONS.	
0905	FRIGATE	6	E	070 200'		
0905	WEDGE TAIL	3	SE	low	- one attacking feeding Wedgetail.	
0910	"	1	NNE	"	- Feeding	
0910	SOOTY TERN	1	"	"	- heading into Laysan	
0915	FRIGATE *	2	E	150'		
0915	WEDGE TAIL	1	E	low		
0916	SOOTY TERN	1	ESE	40'		
0920	SOOTY TERN	350±50	SE	070 250'	Some birds diving to water (50±10) others in column to great height (250'). Flock over SCHOOL OF TORPOISE (ESTIMATE 150-200)	
0925	SOOTY TERN	1	N	low		
0927	BONIN Is.	1	NW	"		
0927	WEDGE TAIL	1	SE	"		
0930	— —	—	—	—	SCHOOL OF TORPOISE HEADING SOUTH.	
0931	R.F. BOOBY	1	SE	10 30'		
0932	WEDGE TAIL	3	ESE	low		
0935	"	2	"	"		
0940	SHEAR - PET	2	N	"		
0941	SOOTY TERN	1	ESE	30'		
0941	FAIRY TERN	1	ESE	80'		
0942	BONIN Is.	2	"	low		
0942	FRIGATE	1	"	"		
0945	— —	1	"	200'		
0948	BONIN Is	2	E	low	LAYSAN STILL IN SIGHT (EST. 10 MI. DISTANT TO NW)	
0951	SOOTY SHEAR(?)	1	SE	"		
0953	SOOTY TERN	1	N	"		
0954	BONIN Is	1	SE	"		
0954	SOOTY TERN	1	ESE	"		
0954	" "	1	NW	60'		
0958	COMMON NODDY	1	ESE	low		
1000	" "	1	"	"		
1000	BONIN Is.	2	"	"		
1000	"	1	"	"		
1000	"	2	N	"		
1003	Com. Noddy	2	NW	"		
1003	WEDGE TAIL	1	SE	"		



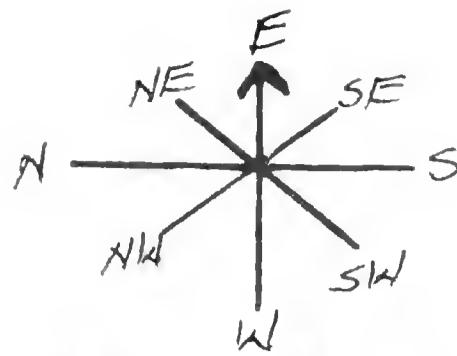
DATE 20 SEPT 64
Pg. # 2

time	species	#	dir.	hgt.	remarks	loc.
13-22	SOOTY TERN	1	W	LOW		
3-5	FRIGATE	1	O	150'		
2-9	BONIN Is.	1	NW	LOW		
8-10	" "	1	NE	LOW		
1019	WEDGETAIL	1	SE	"		
1023	SOOTY TERN	3	NW	"		
1023	" "	2	E	"		
4-5	Bulwer's	1	SE	"		
1026	BONIN Is.	1	S	"		
1030	SOOTY TERN	1	O	100'		
1030	WEDGETAIL	1	SE	LOW		
1034	BONIN Is.	1	E	LOW		
1034	R.-T. TROPIC	1	E	LOW		
1039	R.-F. BOOBY	1	E	100'		
1041	BONIN	1	E	"		
1045	SOOTY TERN	1	E	LOW		
1050	" "	1	NE	50'		
1053	WEDGETAIL	2	N	LOW		
1055	SOOTY TERN	1	NE	"		
1056	WEDGETAIL	1	W	"		
1100	BONIN Is.	1	SE	"		
1100	Bulwer's	2	E	"		
1102	WEDGETAIL	2	"	"		
1103	BONIN Is.	2	E	"		
1107	Bulwer's	1	SE	"		
1128	SOOTY TERN	2	NE	"		
1128	" "	2	S	"		
1139	BONIN Is.	2	NW	"		
1145	SOOTY TERN	1	NE	"		
1147	" "	2	W	100'		
1150	- - -	2	W	40'		
1220	Wedgetail	1	W	LOW		
1221	Pterodroma	1	E	"		
1224	SOOTY TERN	1	W	"		
1229	Bulwer's	1	E	"		
1231	BONIN Is.	1	E	"		
1234	WEDGETAIL	2	SE	"		
FF	1236	Wedgetail	9	SE	"	
	FRIGATE	1	O			
	R.-F. BOOBY	1			Imm. Feeding ad.	
1239	FRIGATE	3	E	150'		
1239	SOOTY TERN	2	NW	60'		
1239	BOOBY Sp.	2	—	0	Setting OAL H ₂ O	



DATE 20 SEPT 64
Pg. # 3

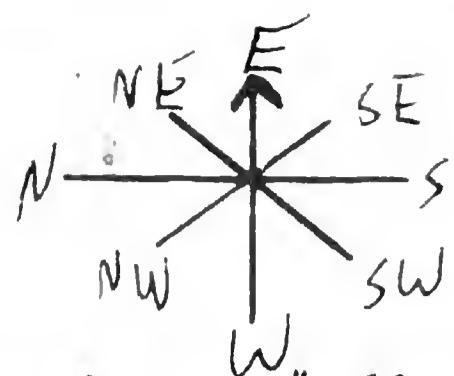
time	species	#	dir.	hgt.	remarks	loc.
1245	WEDGETAIL	1	—	0'		
1245	Bulwer's	1	—	0'	> sitting together on H ₂ O	
1246	WEDGETAIL	5	W	LOW		
1247	Bulwer's	1	W	"		
1249	FRIGATE	2	W	"		
1250	SOOTY TERN	2	O	175'		
1254	WEDGETAIL	1	NW	LOW		
1300	SOOTY TERN	2	N	LOW		
1302	SOOTY SHEAR	1	NW	50'		
1309	WEDGETAIL	1	SE	LOW		
1311	"	1	SE	"		
1311	SOOTY SHEAR	2	SE	"		
1316	WEDGETAIL	1	SE	"		
1319	SOOTY TERN	2	NW	"		
1321	WEDGETAIL	1	"	"		
1329	BONIN Is.	1	SE	"		
1331	WEDGETAIL	1	NE	"		
1331	SOOTY TERN	1	NE	60'		
1336	Bulwer's	1	E	LOW		
1337	SOOTY TERN	2	NNW	150'		
1342	WEDGETAIL	1	SE	LOW		
1342	SP. TROPIC	1	SE	0' TO 100'	- DOVE	
1350	MASKED Booby	1	NW	LOW	- Ad.	
1350	SOOTY TERN	5	NW	80'		
1350	WEDGETAIL	1	SE	LOW		
1352	Bulwer's	1	SE	"		
1356	WEDGETAIL	1	NW	"		
1356	Bulwer's	1	SE	"		
1402	SOOTY SHEAR	1	—	0'		
1410	WEDGETAIL	2	NW	LOW	sitting on H ₂ O - Arising & realighting - not seen feeding	
1413	SOOTY TERN	2	"	60'		
1413	WEDGETAIL	1	SE	LOW		
1414	BONIN Is.	1	E	"		
FF 1415	WEDGETAIL	60 ± 10	—	0'		
F 1420	SOOTY TERN	10 ± 5	O	LOW	Appear to be feeding - No Flying fish seen	
F 1420	WEDGETAIL	50 ± 10	O	"	loose & not feeding	
F 1420	Bulwer's	3	—	"		
1424	Bulwer's	1	LOW	E		
1428	Booby Sp.	1	N	LOW		
1428	WEDGETAIL	1	SE	"	- PROBABLE MASKED	
F 1430	WEDGETAIL	90 ± 10	O	"		
F 1430	Bulwers	2	"	"	- 2 dark phase flock loose & not feeding.	
1437	"	2	W	"		
1442	WEDGETAIL	3	SE	LOW		



DATE 20 SEPT 64
Pg. # 4

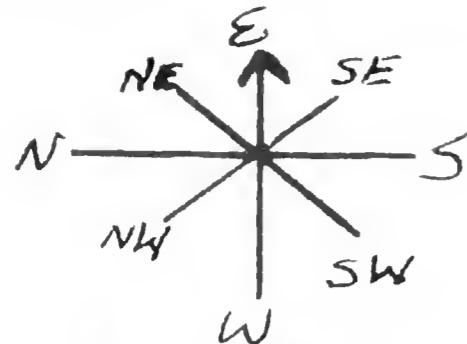
time	species	#	dir.	hgt.	remarks	loc.
1450	WEDGETAIL	1	NW	LOW		
1454	"	1	SE	"		
1457	"	1	NW	"		
1513	"	1	W	"		
1528	SOOTY TERN	5	W	LOW		
1530	WEDGETAIL	1	W	"		
1532	"	2	"	"		
1534	"	1	NW	"		
1542	"	1	S	"		
1552	"	1	SW	"		
1554	"	1	W	"		
1603	"	2	SW	"		
1605	"	1	"	"		
1615	"	1	E	"		
1622	SOOTY TERN	5	WNW	"		
1627	FRIGATE	1	—	175'	- DISTANT + OVER MARO REEF. (ONLY SURF CAN BE SEEN.)	
1627	RUDDY TERN	2	NE	LOW		
1631	Bulwer's	1	E	"		
1632	WEDGETAIL	1	NW	"		
1639	"	1	SW	"		
1647	"	1	N	"		
1700	"	1	"	"	- DINNER BREAK - SINGLE OBSERVER.	
1745	"	1	NW	"		
1808	"	1	"	"		
1816	—	—	—	—	SUNSET - ERASE OBSERVATIONS!	

(All observations for 20 Sept made
by single observer - file.)



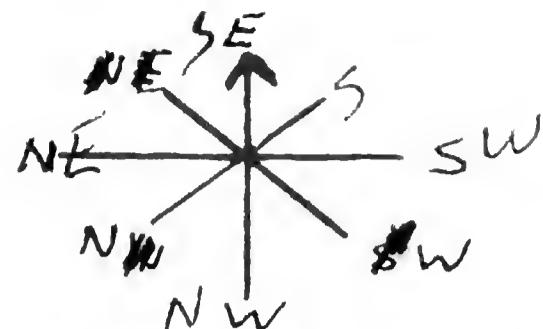
DATE 2 / Sept 64
Pg. # 1

time	species	#	dir.	hgt.	remarks	loc.
0540	- - -	-	-	-	- Begin observation	
0600					sun up	
0612	R-T Tropic	1	E	75'	immature	
0617	Wedge-tail	1	S	Low		
0622	Shear-Petrel	1	E	Low		
0626	Shear Noddy	2	E	20'		
0635	Haw. Noddy	1	E	Low	- followed ship 15-20'	
0635	Wedge-tail	1	E	Low		
0644	Shear-Pt	1	S	Low		
0646	Sooty Shear	1	SSE	Low		
0643	Wedge-tail	2	"	"		
0646	Sooty Tern	1	NNW	20'		
0649	Wedge-tail	1	SSC	Low		
0650	Bulwer's	1	"	"		
FF	0705	Sooty Tern	8	low		
	Wedge-tail	20	④	Low	appeared to be feeding.	
FF	0707	Wedge-tail	1	N	Low	
	0713	Wedge-tail	35	low		
	Gr Frigate	1	④	10-10'	appeared to be feeding	
	Sooty Tern	1	④	70'	Frigate chasing Wedgetails	
	Sooty Tern	1	S	40'		
	0736	Wedge-tail	1	E	Low	
	0747	Sooty Tern	1	SW	15'	
	0806	Wedge-tail	1	N	Low	
	0830	Bonin I. Pet.	1	E	Low	
	0853	Harcours	1	NW	"	
	0856	W.T. Tropic	1	NE	70-50'	
	0857	Frigatebird	1	E	Low to 30'	was chasing the following wedge-tail.
	0857	Wedge-tail	54	S	Low	
	0859	" "	3	④	Low	
	0900	" "	1	④ SW	"	
	0920	" "	6	E	"	
FF	0925	Sooty Tern	30	④		appear to be feeding
		Wedge-tail	40			
		Frigate	3			

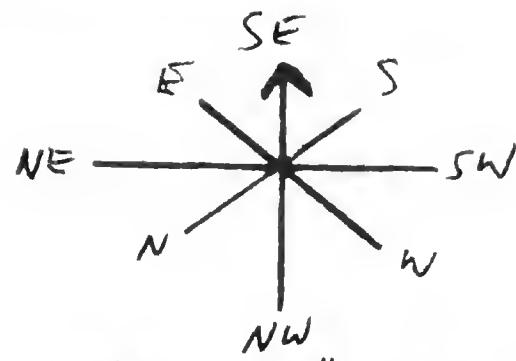


DATE 21 Sept 64
Pg. # 2

time	species	#	dir.	hgt.	remarks	loc.
0934	Warcounts	2	E	low	feeding & alighting on water	
0934	Wedgetail	1	NNE	"		
1003	"	1	N	"		
1011	"	1	E	"		
FF 1012	FRIGATE	3		0'		
	WEDGE TAIL	40±10		TO		
	SOOTY TERN	35±10	○	150'	Feeding - All species.	
	FAIRY TERN	3				
1025	- - -	-	-	-	SHARK - (6') - HEADED SOUTH	
1027	HARCOURT'S	1	F	low		
1056	SOOTY SHEAR	3	ESE	low		
F 1058	WEDGE TAIL	12	N	low		
	FRIGATE	1				
1105	SOOTY TERN	1	SW	60'		
1106	FRIGATE	1	-	130'		
1110	WEDGE TAIL	1	S	low		
1111	"	1	"	"		
1116	SOOTY SHEAR	4	SSE	"		
FF 1123	FRIGATE	3		0'		
	WEDGE TAIL	80±10	○	TO		
	BULWER'S	1		150'	Feeding!	
	SOOTY TERN	4				
1137	WEDGE TAIL	1	E	low		
1144	PIERODROMA	1	E	"	- PROBABLE BONIN	
1146	WEDGE TAIL	1	NW	"		
FF 1154	WEDGE TAIL	200±25				
	SOOTY TERN	18				
	FAIRY TERN	4	N	TO 60'	1-1 in m	
	MASKED BOOBY	1			→ sub-adult	
1200	WEDGE TAIL	1	O	low		
1203	Golden Plover	1	N	50'		
1209	Shearwater	1	-	H2O		
1227	A Frigate	1	O	50'	either Sooty or dark phase WedgeTail	
1227	Wedgetail	1	O	low		
1230	"	2	W	"		
1230	"	1	W	"		
1250	Frigate	1	S	75'	Imm.	
1252	"	1	O	to 50'	Chasing bird below which could not be seen	

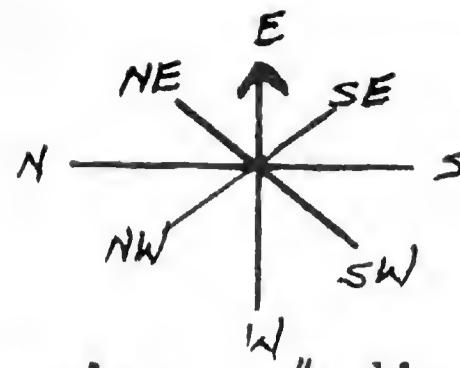


DATE 21 Sept 64
Pg. # 3



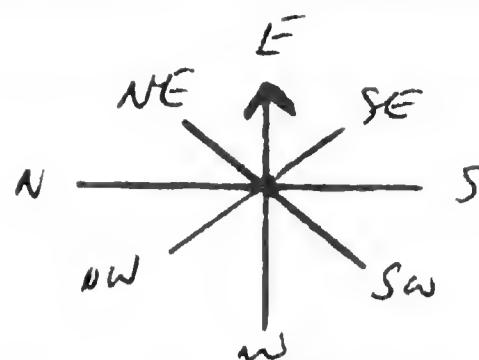
DATE 21 Sept 64
Pg. # 4

time	species	#	dir.	hgt.	remarks	loc.
1719	Wedgetail	1	NNE	low		
FF 1720	Com Noddy	10±10		"	feeding	
	Booby sp.	1				
1720	Fairy Tern	2	NNE	50'		
FF 1730	Wedgetail	55	(?)	low	feeding	
	Marl. Booby	2				
1732	Fairy Tern	3	WSW	low		
F 1734	R-f Booby	5	NNE	low		
1736	Haw. Noddy	2	NNE	low	2 adults 1 subadult 2 immatures not feeding	
1737	R-f Booby	1	NE	low		
1740	Wedgetail sh.	1	NW	low		
1741	Fairy Tern	1	NNE	low		
1742	Brown Boob. Ad.	1	NNE	low		
1744	Fairy Tern	17	NNE	low to 60'	Loose group - unable to determine whether feeding	
1755	R-f Booby	2	N	low		
1755	Fairy Tern	1	N	50'		
1801	Wedgetail	1	SE	low		
1803	Haw. Noddy	1	N	low		
1805	Wedgetail	4	SE	low		
1805					Sun Down,	



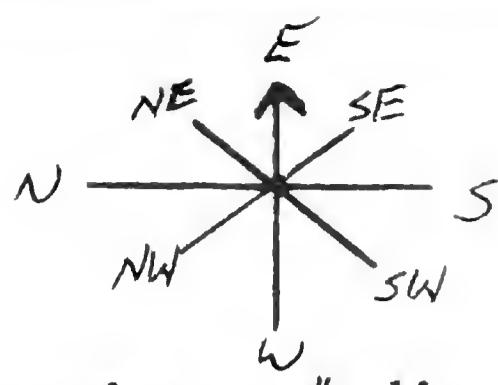
DATE 22 SEPT 64
Pg. # 1

time	species	#	dir.	hgt.	remarks	loc.
0650	-	-	-	-	SUNRISE	
0619	W-T-TROPIC	1	E	150'		
0635	SHEAR-PET	1	S	LOW	- DISTANT	
0641	Ruddy TURNSTONE	1	E	LOW		
0656	W-T. TROPIC	1	SE	125'		
0658	PTEROPODROMA	1	S	LOW		
0659	FRIGATE	1	OR	100'		
0713	TROPICBIRD	2	/	0'	- SITTING ON H ₂ O	
0724	SOOTY SHEAR	1	SSE	LOW		
0740	BONIN Is.	2	S	"		
0742	SOOTY SHEAR	2	SSE	"		
0752	Bulwer's	2	E	"		
0754	BONIN Is.	1	E	"		
0756	WEDGE-TAIL	1	NW	"		
0806	SOOTY SHEAR	1	SE	LOW		
0814	Shear-Pet	1	SE	LOW		
0836	Bulwer's	1	NE	LOW		
0840	Wedge-Tail	1	ON	LOW		
0851	Wedge-Tail	1	ESE	LOW		
0915	"	1	E	"		
0917	SOOTY SHEAR	1	SE	LOW		
0920	" "	2	S	"		
0925	Bulwer's	1	S	"		
0937	BONIN IP	2	E	LOW		
0942	Ruddy Turn	1	E	TO 50'		
0957	Wedge-Tail	1	E	LOW		
1005	Shear Pet	1	NW	"		
1007	Bulwer's	1	ENE	"		
1008	Wedge-Tail	1	"	"		
1016	SHEAR-PET	1	SSW	LOW		
1016	RUDDY TURN	1	OR	"		
1046	Bulwer's	1	NE	"		
1048	Wedge-Tail	1	E	"		
1049	"	1	"	"		
1055	BONIN Is.	1	S	"		
1102	Bulwer's	1	SSW	"		
1103	Wedge-Tail	1	S	"		
1105	"	1	N	"		



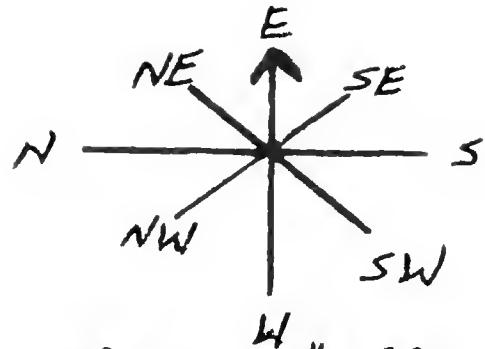
DATE 22 Sept 64
Pg. # 2

time	species	#	dir.	hgt.	remarks	loc.
1109	Fairy Tern	1	NW	100'		
1115	Bulwer's	1	S	low		
1116	FAIRY TERN	1	E	40'		
1119	Wedge-tail	1	N	low		
1120	Bonin Is.	1	N	"		
1120	Bulwer's	1	"	"		
1128	Wedge-tail	1	W	"		
1135	"	1	N	"		
1135	BONNER'S	1	N	"		
1150	R-T Tropic	1	NE	40'		
1212	Wedge-tail	2	E	low		
1217	Sooty Tern	1	S	50'		
1233	Wedge-tail	1	E	low		
1240	Bonin Is	1	E	low		
1240	Fairy Tern	1	Q	50'		
1247	Wedge-tail sh.	1	SW	low		
1248	Bulwer's	1	N	low		
1250	Fairy Tern	4	SE	80'		
1257					ship sighted on horizon sea ahead - Tropic	
1300	Wedge-tail	25	X	low	Feeding.	
	Fairy Tern	4				
	C. Noddy Tern	30				
1312	Sanderling	1	Q	low	circling ship	
1315					man overboard on ship - ship circled to retrieve	
					life rings (missed)	
1324	Bulwer's	1	S	low		
1328	Sooty Shear	1	SE	low		
1335	Can. Noddy	10	Q	low		
1336	Wedge-tail	1	E	low		
1347	Bulwer's	1	S	low		
1355	Wedge-tail	1	S	low		
1359	Wedge-tail	1	W	low		
1411	Sooty Shear	1	SE	"		
1411	Bulwer's	1	N	"		
1424	Tropic bird	1	W/NW	"	feeding or getting off water	
1430	Shear-Pet	2	S	"		



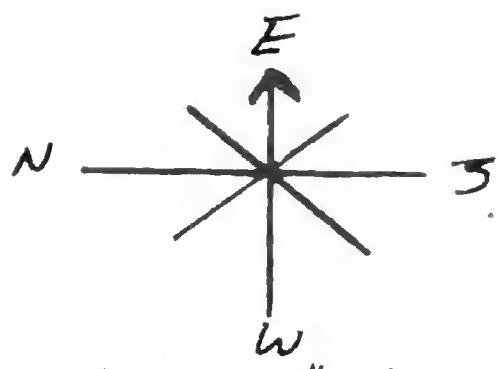
DATE 22 Sept 64
Pg. # 3

time	species	#	dir.	hgt.	remarks	loc.
1438	Bulwers	1	E	low		
1438	"	2	E	low		
1438	Fairy Tern	2	E	"		
1444	Wedgetail	1	N	"		
1450	Bulwers	2				
13-15	Sooty Shear	1				
1451	Harcourts	1				
1451	Wedgetail	1	SE	low		
1455	Sooty Shear	1	SE	"		
1459	"	1	SE	"		
1459	Shear-Pet	1	S	"		
1501	Sooty Shear	1	E	-	Probably going around ship	
1511	Wedgetail	1	E	"		
1514	Bulwers	1	E	"		
1516	Wedgetail	1	N	"		
1525	Sooty Shear	1	SE	"		
1529	Bird	1	ESE	"	Tern? Brown, resembled imm. Sooty, not flying like sooty. Golden Plover?	
1530	Bulwers	1	S	"		
1531	Sooty Shear	1	SE	"		
1531	"	2	SE	"		
1535	"	1	SE	"		
1535	Golden Plover	1	E	"		
1537	Sooty Shear	2	SE	"		
1538	"	1	SE	"		
1544	"	1	SE	"		
1544	Bulwers	1	E	"		
1546	Sooty Shear	1	SE	"		
1549	Fairy Tern	3	O	"	Feeding	
1550	Bulwers	1	SE	"		
1551	"	1	NW	"		
FF	Fairy Tern	1	N	"	Feeding	
1555	Wedgetail	1	N	"		
1555	Sooty Shear	1	H2O	"		
1605	WEDGETAIL	1	N	"		
1611	Bulwer's	1	S	"		
1634	"	1	N	"		
1634	"	1	S	"		
1643	Wedgetail	1	N	"		



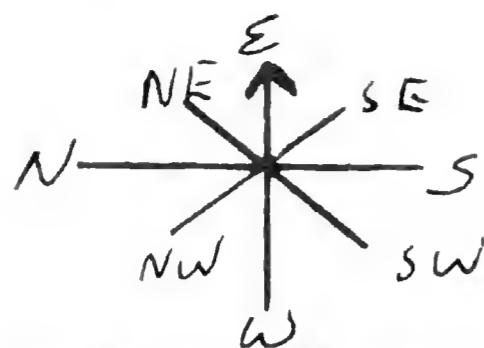
DATE 22 SEPT 64
Pg. # 4

time	species	#	dir.	hgt.	remarks	loc.
1654	Sooty Shear	1	SSE	Low		
1654	Bulwer's P	4	E	Low		
1657	Rnd Tern Stone	1	①	60'		
1659	R-Tropic bird	1	-	H2O		
1700	Bulwer's P	1	42	low		
1702	R-f Booby	1	W	50'		
1707	Sooty Tern	2	W	60'		
1709	Bulwer's	1	NE	low		
1710	"	1	E	"		
1714						
FF 1725	WEDGE-TAIL	450±50			Porpoise 1 going W	
	FAIRY TERN	8			- 3 dk. Phase	
	FRIGATE	3	①	0'		
	BLU-GRAY NOD			70		
1733	BLU-GRAY NOD	1	①	150'		
1740	WEDGE-TAIL	7	①	30'	- imm.	
1743	Bulwer's	1	E	low		
1745	-	-	E	"	SUNSET	



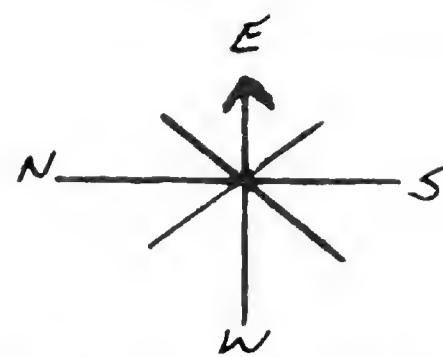
DATE 23 Sept 64
Pg. # 1

time	species	#	dir.	hgt.	remarks	loc.
0632	Sunrise	1	UP	-	-	
0640					- Begin observations; Kauai off port, N. Law in sight	
0642	M. Booby	2	SE	low		
0645	Wedge-tail	1	W	"		
0646	Sooty Tern	3	E	20'		
0648	Wedge-tail	1	NW	low		
0649	M. Booby	7	S	low		
0650	Wedge-tail	1	S	"		
0650	"	4	S	"		
0652	Sooty Shear	3	SE	"		
0653	Wedge-tail	1	S	"		
0654	Noddy sp.	2	NW	"		
0655	Wedge-tail	1	S	"		
0655	Red-foot	1	S	"		
0655	Wedge-tail	1	S	"		
0657	Red-foot	1	S	"		
0657	Wedge-tail	1	SE	"		
0657	Booby sp	3	S	"		
0700	Wedge-tail	1	SE	"		
0700	"	1	SE	"		
0702	"	1	SE	"		
0704	Noddy sp.	1	SE	"		
0704	Sooty Shear	3	SE	"		
0705	Wedge-tail	1	S	"		
0705	Red-foot	1	S	"		
0707	Sooty Tern	3	S	"		
0707	Brown Booby	2	S	"	Ad.	
0707	Red-foot	1	S	"		
0708	Wedge-tail	1	S	"		
0708	"	1	S	"		
0710	Sooty Tern	2	SE	"		
0710	" "	1	SE	"		
0710	Wedge-tail	1	S	"		
0710	"	1	S	"		
0710	"	1	S	"		
0710	Brown Boob	1	S	"		
0711	Sooty Tern	2	SE	"		
0719	Noddy sp	1	SE-E	"		
0720	Brown Booby	1	SE	"		
0720	Tern sp	2	SE	"		
0720	Wedge-tail	1	SE	"		



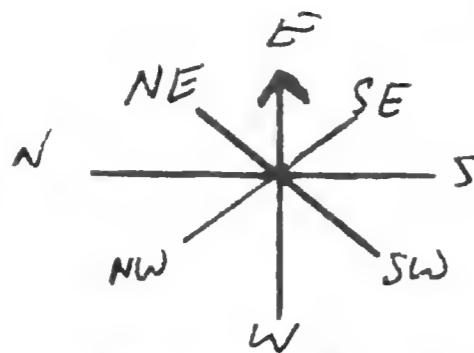
DATE 23 Sept 64
Pg. # 2

time	species	#	dir.	hgt.	remarks	loc.
4-6	0721	Tern	1	S	low	
3-3	0722	Sooty Tern	1	SE	"	
10-11	0722	Wedgetail	1	SE	"	
16-25	0725	Sooty Shear	1	SE	"	
2-3	0730	Brown Booby	2	-	just above H ₂ O	sitting on a board; one got up + circled
	0732	Terns	2	SE	low	
	0735	Sooty Shear	2	SE	"	
	0738	" "	10	SE	"	1-1-1-1 - 2-2-2
	0743	Wedgetail	1	SE	"	
	0745	Brown Booby	1	ESE	"	
	0745	Sooty Shear	1	ESE	"	1 + 5
	0747	" "	1	SE	"	
	0747	Sooty Tern	1	SE	10'	
11	0749	Noddy Sp.	1	S	low	
	0750	Sooty Tern	2	SE	"	
11	0751	C. Noddy	1	W	"	
	0755	- - -	- - -	- - -	-	Kauai now visible
3-3	0800	Sooty Shear	1	SE	low	
	0804	Sooty Shear	1	SE	low	
	0806	Sooty Shear	1	SE	low	
	0809	Sooty Shear	2	SE	low	
	0813	Sooty Shear	3	SE	low	
	0815	Wedgetail	1	SE	low	
3-3	0827	Bulwer's	1	NE	low	
	0834	Wedgetail	1	E	low	
	0841	Wedgetail	1	S	low	
	0845	Wedgetail	1	E	low	
	0851	Wedgetail	1	S	low	
	0854	1 Tern	1	SE	low	
	0921	Wedgetail	1	SW	low	
	0924	Tern	2	W	60'	
	0944	Bulwer's	1	S	low	
	0955	Wedgetail	1	E	low	
	0956	Bulwer's	1	W	low	
11	0959	Fairy Tern	1	E	50'	
	1005	SOOTY TERN	1	N	low	
	1006	WEDGE TAIL	2	S	low	



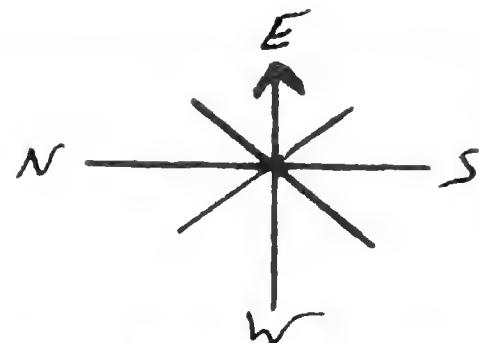
DATE 23 Sept 64
Pg. # 3

time	species	#	dir.	hgt.	remarks	loc.
1020	Newell's	1	N	low		
1020	Shear - Pet	1	S	"		
1030	WEDGETAIL	1	N	"		
1035	"	1	O	"		
1035	"	1	N	"		
1043	Sooty Shear	1	SE	"		
1045	Wedgetail	1	W	"		
1050	"	1	N	"		
1050	"	1	S	"		
1050	Sooty Shear	1	SE	"		
1051	C. Noddy	1	N	"		
1102	Sooty Shear	1	SE	"		
1105	C. Noddy	1	N	"		
1105	Wedgetail	1	E	"		
1110	Sooty Shear	1	SE	"		
1110	Wedgetail	1	S	"		
1110	Noddy sp.	1	N	"		
1112	Sooty Shear	2	SE	"		
1115	" "	18	SE	"	long string	
1115	Bulwers	1	E	"		
1116	Sooty Shear	1	SE	"		
1116	Fairy Tern	1	E	"		
1120	Sooty Shear	1	SE	"		
1122	" "	2	SE	"		
1125	Red-foot B.	1	E	"		
1129	Sooty Shear	2	SE	"		
1131	" "	1	SE	"		
1138	Newell's	1	N	"		
1139	Sooty Shear	1	SE	"		
1148	— — —	— — —			- passed large black rubber donut on H ₂ O	
1150	Sooty Shear	1	SE	"		
1200	Sooty Tern	1	NE	"		
1205	"	10	W	30'		
1207	"	2	NWN	40'		
1209	Sooty shear	2	SSE	low		
FF 1214	Sooty tern	50-10			feeding	
	Fairy Tern	1				
	Frigate	1				
1127	Wedgetail	1	E	low		
1128	Storm petrel	1	"	"	NO White rump visible; flew like Harcourt's, same size = Sooty? Could not see tail shape clearly	



DATE 23 Sept 64
Pg. # 4

time	species	#	dir.	hgt.	remarks	loc.
3-4	1238 Sooty Tern	1	N	low		
	1244 "	1	"	"		
3-5	1253 Sooty shear	1	SE	"		
12-11	1255 Wedgetail	1	ENE	"		
13	1306 Wh-T Tropic	1	SW	50'		
	1310 Wedgetail	1	NNW	low		
	1315 Sooty Tern	2	"	40'		
	1317 Wedgetail	1	WSW	low		
4-11	1327 Sooty shear	1	<u>NNE!</u>	"		
	1332 Newelli	1	W	"		
3-3	1333 Shear. Pet	1	NNW	"		
	1340 Newelli	1	N	"		
	1359 Sooty shear	1	<u>NNE!</u>	"		
	1401 Shear. Pet	1	SE	"		
	1411 Wedgetail	1	N	Low		
	1413 Wedgetail	1	N	Low		
	1414 NEWELL'S sh.	1	N	"		
	1420 "	1	N	"		
	1425 WEDGETAIL	1	NW	"		
	1431 Newell's	2	WNW	"	DK PHASE	
	1439 SHEAR-PET	2	W	Low		
	1443 NEWELL'S	1	S	"		
H	1450 Bonin Is Pet	1	NE	Low		
	1453 Wedgetail	1	WNW	Low		
	1455					
1505	WEDGE-TAIL	1	W	Low	INVESTIGATE SONAR BODY IN H ₂ O.	
1513	Newell's	2	N	Low	I DIVE INTO WATER and completely disappeared beneath the surface. Emerged after 3-5 seconds & resumed normal flight. Resumed feeding.	
2-2	1516 R.F. Booby	1	N	0' to low	- Appeared to be drinking.	
	1522 WEDGETAIL	1	N	low		
	1523 "	1	"	"		
	1542 NEWELL'S	1	W	"		
	1556 ..	1	E	"		
	1558 Wedgetail	1	N	"		
	1608 Fairy Tern	1	E	20'		
	1609 R.F. Boob	1	S	"	Setting on water thrashing & swimming around - appeared to be bathing rather than feeding.	



DATE 23 Sept 64
Pg. #5

f f

time	species	#	dir.	hgt.	remarks	loc.
1638	Sooty Tern	1	NW	30'		
1647	Wedge-tail	1	N	low		
1647	Shear-Pet	1	SE	low		
1652	Marcoussis?	1	N	"		
1658	Wedge-tail	1	W	"		
1733	Newells	1	N	"		
1738	Shear-Pet	1	W	"	Wedge-tail or Newells; diff. of opinion.	
1760	Sooty Shear	1	SE	"		
1751	Newells?	1	N	"	No white up over tail; no flapping but high gliding side to side to ~6 ft. high, And sois?	
1758	Sooty Shear	2	SE	"		
1759	" "	1	SE	"		
1759	Newells?	2	SE	"	Same as 1751	
1808	SS	1	SE	"		
1810	SS	1	SE	"		
1811	Newells?	1	N	"		
1814	SS	1	SE	"		
1818	SS	1	SE	"		
1820	Newells	1	N	"		
1828	SS	3	SE	"		
1830	- - -	- - -	- - -	- - -	Sunset? Disappeared. Extinguished. Sizzled. Fizzled. Gone.	

END AT-SEA OBSERVATIONS
SEPTEMBER 1964!

DATE

4 Sept. 64

Baro

TIME	LAT	LONG	PRES	WEA	VIS	SIP	DRY B	DEW PT	HUM ⁰ /O	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100																
0200																
0300																
0400																
0500																
0600																
0700																
0800																
0900	LEAVE -	HONOLULU HARBOR														
1000	21° 15' N	157° 56' W	Few Clouds	20	1017	3002	83	72	65	4	4	090-5-6	80	22	090	245° 10.5 KTS
1100	21° 11' N	158° 07' W	"	20	1017	3002	83	72	65	4	4	090-5-6	80	22	090	247 10.5 KTS
1200	21° 07' N	158° 16' W	"	20	1017	3002	83	72	65	4	4	090-5-6	80	22	090	247 10.5 KTS
1300	21° 03' N	158° 22' W	"	20	1016	83	75	80	2	7	7	090-5-6	80	17	090	247 11.5 KTS
1400	20° 58' N	158° 39' W	"	20	1014	82	75	80	1	7	7	120-6-6	80	15	100	247 10.0 KTS
1500	20° 55' N	158° 56' W	"	20	1013	82	75	80	1	7	7	120-6-6	80	13	100	247 11.0 KTS
1600	20° 51' N	159° 01' W	"	20	1013	82	75	80	1	7	7	120-6-6	81	12	100	247 11.0 KTS
1700	20° 49' N	159° 12' W	"	20	1012	81	76	80	1	7	7	120-4-5	81	10	100	245 11.0 KTS
1800	20° 46' N	159° 23' W	"	20	1014	81	76	80	1	7	7	120-4-5	81	10	100	245 11.0 KTS
1900	20° 42' N	159° 32' W	"	15	1014	86	79	63	1	1	1	120-4-5	81	10	100	245 11.0 KTS
2000	20° 38' N	159° 44' W	"	20	1013	82	78	76	3	2	2	120-5-5	81	10	100	247 11 KTS
2100	20° 36' N	159° 51' W	"	20	1015	80	75	79	3	2	2	120-5-5	81	10	100	247 11 KTS
2200	20° 34' N	159° 58' W	"	20	1013	80	75	73	3	1	1	120-5-5	81	10	100	247 11 KTS
2300	20° 30' N	160° 08' W	"	20	1017	80	75	73	3	1	1	120-5-5	81	10	100	247 11 KTS
2400	20° 25' N	160° 21' W	"	20	1013	80	75	73	3	1	1	120-5-5	81	10	100	247 11 KTS

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
 WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955
 12-5-63

DATE 5 Sept. 1964

TIME	LAT	LONG	PRES	WEA	VIS	SIP	DRY B	DEW PT	HTMP/O	TE SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	20-28N	160-31W	CLOUDY	15	1013	80	74	79	9	8	120-6-5	81	10	100	245	105 KNOT
0200	20-15N	160-46W	"	15	1013	80	74	79	8	8	120-6-5	81	13	080	245	105 KNOT
0300	20-10N	160-56W	"	15	1012	80	74	79	8	8	120-6-5	81	13	070	245	105 KNOT
0400	20-06N	161-05W	"	15	1012	80	74	79	8	8	120-6-5	81	13	100	245	105 KNOT
0500	20-01N	161-19W	"	8	1013	82	74	76	8	6	120-5-6	81	13	100	245	105 KNOT
0600	19-56N	161-33W	"	15	1014	81	75	83	8	8	120-5-6	81	13	100	245	105 KNOT
0700	19-51N	161-43W	"	15	1014	82	75	80	8	8	120-5-6	81	13	100	245	105 KNOT
0800	19-51N	161-41W	"	20	1015	82	75	83	8	8	120-5-6	P1	15	110	245	105 KNOT
0900	19-47N	161-51W	"	20	1015	83	75	76	8	8	120-5-6	P1	15	110	245	105 KNOT
1000	19-43N	162-00W	"	15	1015	83	75	76	8	8	120-5-6	81	15	110	245	105 KNOT
1100	19-39N	162-13W	"	15	1015	83	75	76	8	8	120-5-6	81	15	110	245	105 KNOT
1200	19-35N	162-20W	"	15	1015	83	75	76	8	8	120-6-6	81	15	110	245	105 KNOT
1300	19-30N	162-32W	"	15	1014	80	74	83	8	9	120-6-6	81	15	110	245	105 KNOT
1400	19-26N	162-38W	"	15	1012	80	74	83	9	9	120-6-6	81	15	110	245	105 KNOT
1500	19-23N	162-47W	"	15	1012	82	74	76	9	8	120-6-6	81	12	080	245	105 KNOT
1600	19-20N	162-55W	"	15	1012	82	74	76	9	8	120-6-6	81	14	090	245	105 KNOT
1700	19-15N	163-08W	"	15	1012	83	74	76	9	8	120-6-6	81	14	090	245	105 KNOT
1800	19-12	163-17W	"	15	1012	82	73	84	9	8	120-6-6	81	14	090	245	105 KNOT
1900	07	-27	"	15	1012	82	75	84	9	8	120-6-6	81	14	090	245	105 KNOT
2000	19-02N	163-38W	"	8	1013	80	73	79	9	8	120-6-6	81	14	090	245	105 KNOT
2100	18-58N	163-47W	"	15	1013	80	73	79	8	8	120-6-6	81	15	080	245	105 KNOT
2200	18-53N	163-57W	"	15	1013	80	73	79	8	8	120-6-6	81	15	080	245	105 KNOT
2300	18-49N	164-06W	"	15	1014	82	73	79	8	8	120-6-6	81	15	080	245	105 KNOT
2400	18-45N	164-12W	"	15	1014	82	73	79	8	8	120-6-6	81	15	080	245	105 KNOT

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955
12-5-63

DATE Sun. 5 Sept. 1964

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY T	DEW PT	HUM%	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	18-48'N	164-21'W	Pip City	15	1012	80	74	83	1	0	380-6-8	82	15	045	245 10 km
0200	18-43'N	164-35'W	" "	15	1011	80	74	83	1	0	380-6-5	82	14	030	245 10 km
0300	18-38'N	164-44'W	" "	15	1011	80	74	83	1	0	380-6-5	83	13	030	245 10 km
0400	18-33'N	164-54'W	" "	15	1011	80	74	83	1	0	380-6-5	81	14	030	245 10 km
0500	18-28'N	165-04'W	" "	8	1011	80	74	83	2	0	380-6-5	81	14	020	245 10 km
0600	18-24'N	165-14'W	"	15	1012	80	74	83	3	0	380-6-4	81	15	349	245 10 km
0700	18-18'N	165-23'W	"	15	1012	80	74	83	3	2	380-6-3	81	12	010	245 10
0800	18-14'N	165-34'W	"	13	1012	80	74	83	3	2	380-6-3	81	12	010	245 10
0900	18-10'N	165-43'W	"	13	1014	82	74	76	3	2	380-6-3	82	10	010	245 10
1000	18-05'N	165-52'W	"	15	1014	82	74	76	3	2	380-6-3	81	12	010	245 10
1100	17-50'N	166-02'W	"	15	1014	83	73	76	3	4	380-6-4	81	10	350	245 10
1200	17-57'N	166-11'W	"	13	1014	83	73	76	3	4	380-6-4	81	10	350	245 10
1300	17-51'N	166-25'W	"	20	1012	83	72	72	3	1	390-10-4	81	10	350	245 10
1400	17-47'N	166-35'W	"	20	1012	83	72	75	4	1	390-10-4	81	12	350	245 10
1500	17-43'N	166-46'W	"	20	1012	83	72	75	3	1	390-10-4	82	10	350	245 10
1600	17-36'N	166-56'W	"	20	1012	83	72	75	3	1	390-10-4	82	12	010	245 10
1700	17-33'N	167-04'W	"	20	1012	82	74	76	3	1	390-10-4	82	10	010	248 10
1800	17-29'N	167-14'W	"	20	1012	82	74	76	4	1	390-5-6	82	10	010	248 10
1900	17-26'N	167-23'W	"	16	1013	81	74	83	4	1	390-5-6	81	12	015	248 10
2000	17-23'N	167-34'W	"	16	1013	81	74	83	4	1	390-5-6	81	12	015	248 10
2100	17-17'N	167-49'W	"	15	1013	81	74	83	4	4	390-5-6	81	10	020	248 10
2200	17-12'N	167-59'W	"	13	1014	81	74	83	4	4	390-5-6	81	10	020	248 10
2300	17-08'N	168-04'W	"	15	1014	81	74	83	4	4	390-6-5	81	10	020	248 10
2400	17-05'N	168-19'W	"	15	1014	81	74	83	4	4	390-6-5	81	10	020	248 10

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955
12-5-63

DATE Mon. 7 Sept. 1964

TIME	LAT	LONG	PRS	WEA	VIS	SLP	DRY B	DEW PT	HUM%	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	17-02N	168-27W	Cld	Wdm	15	1013	81	73	79	9	8	Calm	82	10	015	248 10.5 kn
0200	16-52N	168-35W	" "	15	1013	81	73	79	9	8	u	82	Variable	248	12 kn	
0300	16-55N	168-45W	" "	15	1012	80	74	83	9	8	11	82	8	100	248 10 kn	
0400	16-51N	168-53W	Cloudy	15	1012	80	74	83	9	7	11	82	8	100	248 10 kn	
0500	16-47N	168-54W	"	8	1012	80	76	83	9	3	u	82	5	100	248 10	
0600	16-44N	168-51W	Partly Cloudy	15	1012	80	76	87	2	0	0	82	5	100	248 10K	
0700	16-42 "	168-55W	"	20	1013	82	77	84	2	0	0	82	5	100	248 10K	
0800	16-38N	168-55W	"	20	1013	82	77	84	3	0	0	82	5	100	248 10K	
ENTER CWD	16-30N	169-26W	FCW Cloudy	20	1014	83	75	76	2	1	045	82	10	045	160 - 10K	
0900	16-21N	169-23W	"	20	1014	83	75	76	2	1	045	82	10	045	160 - 10K	
1100	16-11N	169-20W	"	20	1014	83	75	76	0	0	070	82	10	070	160 - 10.5	
1200	16-01N	169-17W	"	20	1014	83	75	76	0	0	070	82	10	070	160 - 10.5	
1300	15-53N	169-16W	"	20	1012	84	74	69	1	0	060-6-4	82	6	070	142 10.5	
1400	15-43N	169-15W	"	20	1011	83	74	76	1	0	070-6-4	82	8	050	166 10.5	
1500	15-32N	168-12W	"	20	1010	82	74	76	5	2	070-6-4	82	10	050	160 10.5	
1600	15-23N	168-08W	"	20	1010	82	74	76	4	2	070-6-4	82	10	050	160 10.5	
1700	15-13N	168-03W	"	20	1011	82	74	76	4	1	070-6-4	82	10	060	160 10.5	
1800	15-05N	168-01W	"	15	1011	82	74	76	4	1	050-6-4	82	8	060	160 10.5	
1900	14-52N	168-00W	CLEAR	20	1012	82	74	76	0	0	090-5-4	82	10	090	160 10	
2000	14-46N	168-55W	"	20	1012	81	74	80	0	0	090-5-4	82	10	090	160 10	
2100	14-38N	168-52W	"	20	1013	81	74	80	0	0	090-5-4	82	10	090	160 10	
2200	14-32N	168-53W	"	20	1013	81	74	80	0	0	090-5-4	82	10	090	222 10	
2300	14-22N	168-03W	"	20	1013	81	74	80	0	0	090-5-4	82	10	090	222 10	
2400	14-15N	168-08W	"	20	1015	81	74	80	0	0	090-5-4	82	10	090	222 10	

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955
12-5-63

DATE TUES. 8 Sept. 1964

TIME	LAT	LONG	PRES	WEA	VIS	SIP	DRY P	DEW PT	HUMO/0	TE SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.	
0100	14-05 N	169-17 W	1012	Partly Cloudy	15	1012	81	73	79	4	1	090-5-4	82	12	080	222	10.5 Kts
0200	14-00 N	169-22 W	8	"	15	1011	81	73	79	4	1	090-5-4	82	12	080	222	10.5 Kts
0300	13-53 N	169-30 W	"	"	15	1011	81	73	79	1	0	090-5-4	82	10	080	222	10 Kts
0400	13-45 N	169-32 W	"	"	15	1011	81	73	79	1	0	090-5-4	82	10	080	222	10 Kts
0500	13-37 N	169-45 W	"	"	5	1011	81	73	84	1	0	090-5-4	82	12	357	222	10 Kts
0600	13-24 N	169-52 W	"	"	20	1011	82	77	84	1	0	090-5-4	82	12	357	222	10 Kts
0700	13-23 N	170-00 W	"	"	20	1012	82	78	84	1	0	090-5-4	82	12	090	222	10 Kts
0800	13-17 N	170-04 W	"	"	20	1012	82	74	74	1	0	090-5-4	72	12	090	222	10 Kts
0900	13-22 N	170-06 W	"	"	20	1013	72	74	74	2	2	090-5-4	72	10	090	222	10 Kts
1000	13-07 N	170-13 W	Cloudy	"	20	1013	75	76	69	2	1	090-5-4	82	10	090	222	10 Kts
1100	12-59 N	170-19 W	"	"	15	1013	85	76	69	2	1	090-5-4	72	10	090	222	10 Kts
1200	12-51 N	170-27 W	Partly Cloudy	"	10	1013	78	77	96	10	10	090-5-4	82	15	090	222	10 Kts
1300	12-38 N	170-46 W	"	"	10	1012	82	75	80	5	3	090-5-4	82	10	080	222	10 Kts
1400	12-31 N	170-48 W	Partly Cloudy	"	15	1012	82	75	80	5	3	090-5-4	82	8	080	222	10 Kts
1500	12-23 N	170-55 W	"	"	20	1011	82	75	80	3	1	135-7-4	82	7	080	222	10 Kts
1600	12-16 N	171-02 W	"	"	20	1011	82	75	80	3	1	135-7-4	83	8	080	222	10 Kts
1700	12-09 N	171-10 W	"	"	20	1011	82	77	84	6	1	135-5-4	83	8	090	222	10 Kts
1800	12-03 N	171-18 W	"	"	20	1011	84	76	76	6	1	090-2-4	82	10	060	314	10.5 Kts
1900	12-13 N	171-32 W	"	"	15	1011	82	77	84	5	1	090-2-4	82	10	060	314	10.5 Kts
2000	12-21 N	171-33 W	"	"	7	1012	81	74	79	3	2	090-5-4	73	10	070	314	11
2100	12-30 N	171-43 W	Few Clouds	"	15	1012	81	74	79	3	2	090-5-4	73	10	070	314	11
2200	12-38 N	171-51 W	"	"	15	1012	81	77	79	3	2	090-5-5	83	10	070	314	11
2300	12-46 N	171-46 W	"	"	15	1012	81	74	78	3	2	090-5-5	83	10	070	048	10 Kts
2400	12-52 N	171-39 W	"	"	15	1012	81	74	79	3	2	090-5-5	73	10	070	048	10 Kts

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955
12-5-63

165
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1825

DATE Wed 9 Sept. 1964

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUMO ₁₀	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	12-59 N	171-95 W	Ply Clby	10	1011	80	76	27	3	2	080-5-5	83	7	090	048 10
0200	13-06 N	171-25 W	" "	10	1010	80	77	31	1	0	080-5-4	83	5	080	048 10
0300	13-13 N	171-18 W	"	5	1009	80	77	31	3	0	090-5-4	83	5	070	048 10
0400	13-20 N	171 W	" "	10	1009	80	76	23	2	1	090-5-4	83	Vanuatu Rds	048 10	
0500	13-27 N	171-04 W	" "	5	1010	80	76	27	2	0	090-5-4	73	13	110	048 10
0600	13-34 N	170-56 W	" "	15	1010	80	76	27	3	0	090-5-4	73	4	150	048 10
0700	13-30 N	170-55 W	" "	15	1011	80	76	27	3	0	090-5-4	73	6	150	048 10
0800	13-40 N	170-48 W	" "	15	1012	82	71	24	4	0	090-5-4	73	4	150	048 10
0900	13-50 N	170-37 W	Cloudy	10	1012	82	77	24	8	0	090-5-5	83	13	090	048 10
1000	13-58 N	170-30 W	"	10	1012	84	76	26	8	0	090-5-5	83	10	090	048 10
1100	14-05 N	170-23 W	"	15	1012	84	76	26	8	0	090-5-5	83	12	090	048 10
1200	14-12 N	170-16 W	"	15	1012	84	76	26	8	0	090-5-5	83	10	090	048 10
1300	14-18 N	170-10 W	Ply Clby	20	1011	84	76	26	5	4	090-5-5	83	15	090	048 10
1400	14-26 N	170-02 W	" "	20	1010	84	76	26	5	3	090-5-5	83	12	090	048 10
1500	14-33 N	169-58 W	" "	20	1010	84	76	26	5	4	090-5-5	83	15	090	048 10
1600	14-40 N	169-47 W	Cloudy	20	1010	84	76	26	9	8	090-5-5	83	15	090	048 10
1700	14-47 N	169-40 W	" "	20	1010	82	77	24	8	4	090-5-5	83	8	116	047 10
1800	14-54 N	169-32 W	"	20	1010	82	74	26	7	4	090-5-5	73	8	116	047 10
1900	15-03 N	169-22 W	Clear	20	1012	82	74	26	0	0	090-5-6	83	15	090	314 - 10
2000	15-10 N	169-29 W	Clear	20	1013	82	74	26	0	0	090-5-6	83	15	090	314 - 11 KTS
2100	15-18 N	169-38 W	Clear	20	1013	82	74	26	0	0	090-5-6	73	15	090	314 - 11 "
2200	15-25 N	169-46 W	Cloudy	20	1013	82	74	26	0	0	090-5-6	83	15	090	314 - 11 KTS
2300	15-33 N	169-55 W	Clear	20	1013	82	74	26	0	0	090-5-6	83	15	040	314 - 11 KTS
2400	15-36 N	170-03 W	Clear	20	1013	82	74	26	0	0	090-5-6	83	15	090	312 - 11 KTS

REMARKS:

* Passing 3200W

XXRAY

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955
12-5-63

DATE Thurs. 10 Sept. 1964

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM%	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	15-28N	170-11W	1010.64	10	1012	81	74	83	2	0	090-5-6	82	15	080	222 13.5
0200	15-23N	170-18W	* n -	10	1012	80	74	83	4	2	090-5-6	82	17	070	222 13.5
0300	15-12N	170-25W	* n -	10	1011	80	74	83	3	1	090-5-6	82	17	080	222 13.5
0400	15-06N	170-33W	* n -	10	1011	80	74	83	3	2	090-5-6	82	17	080	222 13.5
0500	14-58N	170-42W	-	05	1010	80	77	91	4	2	090-5-6	82	18	070	223 13.5
0600	14-49N	170-52W	-	10	1011	82	77	84	4	1	090-5-6	82	18	070	223 13.5
0700	14-48N	170-57W	9	15	1011	72	77	84	4	1	090-5-6	82	18	070	223 13.5
0800	14-40N	171-01W	n	15	1011	83	76	80	4	1	090-5-6	83	18	070	223 13.5
0900	14-32N	171-05W	n	15	1012	83	76	80	6	6	090-5-6	83	20	080	223 13.5
1000	14-25N	171-12W	n	15	1012	85	76	73	6	4	090-5-6	83	20	080	225 13.5
1100	14-16N	171-20W	n	15	1012	85	76	73	6	6	090-5-6	83	20	090	225 10.5
1200	14-02N	171-28W	n	15	1012	83	76	73	6	6	090-5-6	83	20	080	225 10.5
1300	14-03N	171-38W	n	15	1011	85	76	73	6	5	090-5-6	82	20	090	220 10.5
1400	13-56N	171-41W	"	15	1010	85	76	73	6	5	090-5-6	82	20	090	225 10.5
1500	13-48N	171-56W	"	15	1010	85	76	73	6	5	090-6-8	81	20	080	225 10.5
1600	13-41N	172-03W	"	15	1009	85	76	73	6	5	090-6-8	81	20	080	225 10.5
1700	13-33N	172-11W	"	15	1009	84	76	74	6	5	090-6-8	81	18	070	225 10.5
1800	13-23N	172-19W	"	15	1009	84	76	74	6	4	090-6-8	81	18	080	223 10.5
1900	13-18N	172-27W	"	15	1009	84	77	84	6	4	090-6-8	82	18	080	315 10.5
2000	13-21N	172-35W	"	15	1009	82	77	77	6	4	090-6-8	82	18	080	315 10.5
2100	13-32N	172-42W	Cloud	15	1010	82	77	77	0	0	070-6-8	82	22	070	315 11K
2200	13-40N	172-51W	Cloud	20	1012	72	77	74	0	0	070-6-8	82	22	070	315 11K
2300	13-47N	172-59W	Cloud	20	1012	72	77	74	0	0	070-6-8	82	22	070	315 11K
2400	13-56N	173-01W	Cloud	20	1012	82	77	74	0	0	070-6-8	82	22	070	315 11K

REMARKS:

* w/squalls

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955
12-5-63

DATE

11 Sept. 1964

TIME	LAT	LONG	PRES	WEA	VIS	SLP	DRY B	DEW PT	HUM%	TR	SKY	OPA	SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	14-04N	172-53W	1012	Cloudy	10	1012	82	77	84	4	2	090-6-8	87	17	080	048	9.5 Kts	
0200	14-10N	172-47W	"	"	10	1011	82	77	84	2	0	090-6-8	82	17	080	048	9 Kts	
0300	14-16N	172-40W	"	"	10	1011	82	77	84	2	0	090-6-8	82	17	080	048	9 Kts	
0400	14-23N	172-34W	"	"	10	1011	82	77	84	3	0	090-6-8	82	17	080	048	9 Kts	
0500	14-29N	172-28W	"	"	5	1011	82	74	74	3	5	090-6-8	73	18	080	048	9	
0600	14-34N	172-21W	"	"	8	1011	82	77	84	3	2	090-6-8	82	18	080	048	9 Kts	
0700	14-35N	172-16W	"	"	10	1012	82	77	84	4	2	090-6-8	82	18	080	048	9 Kts	
0800	14-38N	172-11W	"	"	15	1012	82	77	84	4	2	090-6-8	82	18	080	045	9 Kts	
0900	14-45N	171-06W	"	"	15	1013	84	76	76	5	4	080-6-8	82	25	080	045	9 Kts	
1000	14-52N	171-57W	"	"	12	1014	84	76	76	5	4	080-6-8	82	25	080	045-7 Kts		
1100	14-57N	171-54W	"	"	15	1014	84	76	76	4	4	080-6-8	82	20	080	045	9 Kts	
1200	15-05N	171-47W	"	"	15	1014	84	76	76	4	4	080-6-8	82	20	080	045-9 Kts		
1300	15-11N	171-39W	"	"	15	1012	82	77	84	6	7	080-6-8	82	20	080	045	8.5	
1400	15-17N	171-33W	"	"	15	1011	82	77	84	8	1	080-6-8	82	20	070	045	8.5	
1500	15-23N	171-27W	"	"	15	1011	82	77	84	6	1	080-6-8	82	20	070	045	8.5	
1600	15-30N	171-21W	"	"	15	1011	82	77	84	6	1	080-6-8	82	20	080	045	8.7	
1700	15-37N	171-15W	"	"	15	1011	82	77	84	6	1	080-6-8	82	17	120	045	8.7	
1800	15-43N	171-09W	"	"	10	1011	82	77	84	6	1	080-6-8	82	17	120	045	8.7	
1900	15-50N	171-02W	"	"	8	1011	82	77	84	6	1	080-6-8	79	17	120	045	9.1	
2000	15-56N	170-55W	"	"	9	1011	82	77	84	6	1	080-6-8	79	17	120	045	9.1	
2100	15-02N	170-53W	FR	Cloudy	15	1012	82	77	84	4	3	080-6-8	82	15	080	045	8.6	
2200	16-09N	170-47W	"	"	15	1014	82	77	84	4	3	080-6-8	82	15	080	045	8.6	
2300	16-15N	170-40W	"	"	15	1014	82	77	84	4	3	080-6-8	82	15	080	045	8.6	
2400	16-23N	170-34W	"	"	15	1014	82	77	84	4	3	080-6-8	82	15	090	045	10.0 Kts	

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
 WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955
 12-5-63

DATE 12 Sept. 1964

TIME	LAT	LONG	FRES WEA	VIS	SIP	DRY B	DEW PT	HUMO/	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.	
0100	16-30 N	170-57 W	131/000	15	1010	80	74	83	3	1	080-6-8	82	17	085	304 11 km	
0200	16-36 N	171-05 W	2	15	1012	81	73	79	3	1	080-6-8	82	16	080	314 11 km	
0300	16-43 N	171-12 W	4	15	1012	80	74	83	3	2	080-6-8	83	16	080	314 11 km	
0400	16-49 N	170	11	15	1012	80	74	83	3	1	080-6-8	82	16	080	222 10 km	
0500	16-35 N	171-28 W	4	14	1014	82	77	84	4	2	080-6-8	82	14	080	202 10 km	
0600	16-28 N	171-50 W	2	8	1014	82	77	84	4	2	080-6-8	82	16	080	222 10 km	
0700	16-18 N	171-45 W	*	10	1014	82	77	84	4	2	080-6-8	82	16	080	222 10 km	
0800	16-10 N	171-52 W	*	10	1014	72	77	84	4	1	080-6-8	72	16	080	222 10 km	
0900	16-13 N	171-55 W	"	15	1014	84	74	73	4	3	090-6-8	82	15	090	222 10 km	
1000	16-06 N	172-03 W	*	11	1014	84	74	73	4	3	090-6-8	82	15	080	222 10 km	
1100	15-59 N	172-11 W	"	15	1014	84	74	73	4	3	090-6-8	82	15	090	222 10 km	
1200	15-51 N	172-20 W	"	15	1014	84	74	73	4	3	090-6-8	82	15	090	222 10 km	
1300	15-48 N	172-22 W	"	11	15	1012	83	76	76	4	1	090-6-8	82	13	080	222 10 km
1400	15-48 N	172-23 W	*	2	15	1012	83	76	76	3	0	090-6-7	82	13	080	222 10 km
1500	15-38 N	172-38 W	*	11	15	1012	83	76	76	3	0	090-6-7	82	13	080	222 10 km
1600	15-26 N	172-45 W	*	11	15	1012	83	76	76	3	0	090-6-7	82	13	080	222 10 km
1700	15-19 N	172-54	*	4	15	1012	83	76	76	3	0	090-6-7	82	13	080	222 10 km
1800	15-11 N	173-01	*	1	15	1012	73	76	76	5	1	090-6-6	82	14	080	222 10 km
1900	15-02 N	173-09	*	10	1012	83	76	76	5	1	090-6-6	82	14	080	222 10 km	
2000	14-56 N	173-17	*	7	1011	83	76	76	5	1	090-6-6	82	14	080	222 10 km	
2100	14-48 N	173-26 W	*	15	1012	82	77	84	2	2	090-6-7	82	16	080	222 10 km	
2200	14-40 N	173-33 W	*	15	1012	82	77	84	2	2	090-6-7	82	16	080	222 10 km	
2300	14-33 N	173-40 W	*	15	1012	82	77	84	2	2	090-6-7	82	16	080	222 10 km	
2400	14-40 N	173-44 W	*	15	1012	82	77	84	2	2	090-6-7	82	16	080	222 10 km	

REMARKS:

W.H.S.

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955
12-5-63

DATE 13 Sept. 1964

TIME	LAT	LONG	FRES WEA	VIS	SIP	DRY B	DEW PT	HUM ₀ / ₁₀	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	14-48N	173-55W	Partly cloudy	15	1013	82	74	83	2	1	090-6-8	82	17	080	044 10.5 Kts
0200	14-55N	174-03W	2 "	15	1012	82	75	80	1	0	090-6-8	82	17	080	044 10.5 Kts
0300	15-02N	174-08W	2 "	15	1012	82	75	80	1	0	090-6-8	82	17	080	044 10.5 Kts
0400	15-10N	174-10W	2 "	15	1012	82	75	80	2	0	090-6-8	82	17	080	044 10.5 Kts
0500	15-18N	174-03	2 "	8	1012	82	74	76	2	0	090-6-8	82	17	080	044 10.5 Kts
0600	15-27N	173-53W	2 "	8	1012	82	74	74	2	0	090-6-8	82	17	080	044 10.5 Kts
0700	15-38N	173-54W	2 "	10	1012	82	74	76	2	0	090-6-8	82	15	080	044 10.5 Kts
0800	15-25N	173-47W	2 "	15	1012	82	74	76	2	0	090-6-8	82	15	080	044 10.5 Kts
0900	15-40N	173-33W	2 "	15	1013	83	72	80	2	2	090-6-7	82	13	090	045 9.5 Kts
1000	15-46N	173-26W	2 "	15	1014	83	76	80	2	2	090-6-7	82	13	090	045 9.5 Kts
1100	15-53N	173-20W	2 "	15	1014	83	76	80	3	2	090-6-7	82	15	090	045 9.5 Kts
1200	16-00N	173-13W	2 "	15	1014	83	76	80	5	2	090-6-7	82	15	090	045 9.5 Kts
1300	16-05N	173-09W	2 "	15	1013	84	74	73	8	5	090-6-7	82	13	090	045 9.5 Kts
1400	16-11N	173-03W	2 "	15	1013	83	74	76	4	1	090-6-7	82	13	090	045 9.5 Kts
1500	16-18N	172-55W	2 "	15	1012	83	74	76	5	2	090-6-7	82	13	090	045 9.5 Kts
1600	16-25N	172-47W	2 "	15	1012	83	74	76	4	2	090-6-7	82	13	090	045 9.5 Kts
1700	16-32N	172-48W	2 "	15	1013	83	76	80	8	5	090-6-7	82	13	090	045 9.5 Kts
1800	16-33N	172-41W	2 "	10	1013	82	77	84	7	4	090-6-7	82	13	090	045 9.4 Kts
1900	16-40N	172-34W	2 "	5	1014	82	77	84	8	4	090-6-7	82	15	090	045 9.5 Kts
2000	16-47N	172-31W	2 "	5	1014	82	77	84	8	4	090-6-7	82	15	090	045 9.5 Kts
2100	16-53N	172-26W	Cloudy	10	1013	82	77	84	10	10	090-6-8	82	15	090	045 9 Kts
2200	17-00N	172-19W	Cloudy	10	1013	82	77	84	10	10	090-6-8	82	15	090	045 9 Kts
2300	17-06N	172-12W	Cloudy	10	1015	82	77	84	10	10	090-6-8	82	17	090	045 9 Kts
2400	17-11N	172-06W	Cloudy	10	1015	82	77	84	10	10	090-6-8	82	17	090	045 9 Kts

REMARKS:

XRAY

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955
12-5-63

DATE 19 Sept. 1964

TIME	LAT	LONG	PRES	WEA	VIS	SLP	DRY B	DEW PT	HUM%	OPA	TI	SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	17-16N	172-04W	Cloudy	Yearn	10	1014	80	73	78	9	9	8	090-6-8	82	18	100	045	9 kn
0200	17-22N	171-58W	" "	"	10	1014	80	73	78	9	8	8	090-6-8	82	15	090	003	10 kn
0300	17-31N	171-58W	" "	"	10	1014	80	73	79	8	7	8	090-6-8	82	15	090	003	10 kn
0400	17-41N	171-58W	" "	"	10	1013	81	73	77	8	7	8	090-6-8	82	16	090	003	10 kn
0500	17-51N	171-57W	" "	"	8	1014	80	72	75	8	7	8	090-6-8	82	16	090	003	10 kn
0600	18-00N	171-46W	" "	"	10	1014	81	74	79	6	7	8	090-6-8	82	16	090	043	10
0700	18-04N	171-46W	" "	"	10	1016	81	74	79	8	7	8	090-6-8	82	16	090	001	10
0800	18-12N	171-47W	" "	"	20	1016	81	74	79	8	7	8	090-6-7	82	15	090	003	9.5
0900	18-26N	171-59W	"	"	10	1016	82	74	79	8	7	8	090-6-7	82	15	090	003	9.5
1000	18-30N	171-59W	"	"	20	1016	83	76	80	8	7	8	090-6-7	82	15	090	003	9.5
1100	18-39N	171-58W	"	"	20	1016	83	76	80	8	7	8	090-6-7	82	15	090	003	9.5
1200	18-49N	171-58W	"	"	20	1016	83	76	80	8	7	8	090-6-7	82	15	090	003	9.5
1300	18-30N	171-58W	0125L	"	20	1015	82	74	76	9	7	8	090-6-7	82	16	100	093	10 kn
1400	19-08N	171-57W	"	"	20	1015	82	74	76	9	8	8	090-6-7	82	13	120	003	10 kn
1500	19-18N	171-57W	"	"	20	1015	82	74	76	9	8	8	090-6-7	82	13	120	003	10 kn
1600	19-28N	171-57W	"	"	15	1015	82	74	76	9	8	8	090-6-7	82	13	120	003	10 kn
1700	19-39N	171-57W	Cloudy	"	15	1015	83	75	80	8	7	8	090-6-7	82	14	120	003	10
1800	19-49N	171-57W	"	"	10	1015	82	75	80	8	7	8	090-6-7	82	14	100	003	10
1900	20-00N	171-56W	"	"	8	1015	82	75	80	8	7	8	090-6-7	82	15	100	003	10
2000	20-07N	171-55W	"	"	8	1015	82	75	80	8	7	8	090-6-7	82	15	100	003	10
2100	20-19N	171-56W	Flood	Clouds	15	1013	81	73	75	3	2	8	090-6-6	82	10	090	003	10 KT
2200	20-30N	171-56W	"	"	15	1013	81	73	75	3	2	8	090-6-6	82	10	090	003	10 KT
2300	20-40N	171-55W	"	"	15	1016	81	73	75	3	2	8	090-6-6	82	10	090	003	10 KT
2400	20-51N	171-55W	"	"	15	1016	81	73	75	3	2	8	090-6-6	82	10	090	003	10 KT

REMARKS:

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ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955
12-5-63

DATE 15 Sept. 1964

TIME	LAT	LONG	PRES	WEA	VIS	SLP	DRY B	DEW PT	HUMO/	TH SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	21° 30' N	171° 55' W	1018	Cloudy	15	1012	80	74	79	3	2	080-6-7	82	17	090	003 10 k
0200	21° 30' N	171° 55' W	1018	+	15	1017	80	74	79	2	1	090-6-7	82	17	090	003 10 k
0300	21° 28' N	171° 55' W	1018	+	15	1017	80	74	79	1	0	090-6-7	82	17	090	003 10 k
0400	21° 30' N	171° 55' W	1018	+	15	1017	80	74	79	2	0	090-6-7	82	17	090	003 10 k
0500	21° 40' N	171° 55' W	+	+	8	1017	80	74	84	3	0	090-6-7	82	16	090	003 10 k
0600	21° 50' N	171° 55' W	+	+	10	1018	82	74	76	3	0	090-6-7	82	16	090	003 10 k
0700	22° 00' N	171° 55' W	+	+	12	1018	82	74	76	3	0	090-6-7	82	16	090	003 10 k
0800	22° 10' N	171° 55' W	+	+	15	1018	82	74	76	3	0	090-6-7	82	16	090	003 10 k
0900	22° 18' N	171° 53' W	11	20	1018	82	74	76	3	2	0	090-6-7	82	18	090	003 10 k
1000	22° 28' N	171° 53' W	11	20	1019	82	74	76	3	2	0	090-6-7	82	18	090	003 10 k
1100	22° 37' N	171° 52' W	11	20	1019	82	74	76	3	2	0	090-6-7	82	18	090	003 10 k
1200	22° 47' N	171° 52' W	11	20	1019	82	74	76	3	2	0	090-6-7	82	18	090	003 10 k
1300	22° 57' N	171° 52' W	11	20	1018	82	74	76	8	6	0	090-6-7	82	15	180	001 10 k
1400	23° 03' N	171° 52' W	11	20	1018	80	73	72	7	5	0	090-6-7	82	15	090	001 10 k
1500	23° 12' N	171° 52' W	11	20	1018	80	73	77	8	7	0	090-6-7	82	15	090	001 10 k
1600	23° 22' N	171° 52' W	11	20	1018	80	73	79	8	6	0	090-6-7	81	15	090	001 10 k
1700	23° 32' N	171° 51' W	11	20	1018	80	74	83	8	6	0	090-6-7	81	16	290	001 10 k
1800	23° 42' N	171° 50' W	11	10	1018	80	74	73	9	7	0	090-6-7	81	16	090	001 10 k
1900	23° 53' N	171° 50' W	11	10	1019	80	73	79	9	7	0	090-6-7	81	16	090	001 10 k
2000	23° 03' N	171° 50' W	11	10	1019	82	73	79	9	7	0	090-6-7	81	16	090	001 10 k
2100	24° 10' N	171° 51' W	Cloudy	15	1019	80	73	79	8	7	0	090-6-7	81	15	090	001 10 k
2200	24° 20' N	171° 51' W	1	15	1020	80	73	79	8	7	0	090-6-7	81	15	090	001 10 k
2300	24° 30' N	171° 50' W	1	15	1020	80	73	79	8	7	0	090-6-7	81	15	090	001 10 k
2400	24° 40' N	171° 50' W	1	15	1020	80	73	79	8	7	0	090-6-7	81	15	090	001 10 k

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955
12-5-63

DATE 16 Sept. 1964

NO OBSERVATIONS MADE THIS DAY - NO FIX SHEET J.D.W.

TIME	LAT	LONG	PRES	WEA	VIS	SIP	DRY P	DEW PT	HUM ₁₀	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	24-50N	171-50W	Clly	4/126	12	1020	80	73	72	8	7	090-6-7	80	17	090	261 10km
0200	25-00N	171-50W	Clly	4/126	7	1020	78	72	83	7	8	090-6-7	80	17	090	001 10km
0300	25-10N	171-50W	Clly	4/126	12	1020	75	72	83	9	8	090-6-7	80	17	110	061 12km
0400	25-20N	171-49W	Clly	4/126	12	1020	78	72	83	9	8	090-6-7	80	17	160	000 16km
0500	25-30N	171-49W			8	10										
0600	25-40N	171-50W			10											
0700			ANCHORED AT LAYSAN ISLAND													
0800																
0900																
1000																
1100																
1200																
1300																
1400																
1500																
1600																
1700																
1800																
1900																
2000																
2100																
2200																
2300																
2400																

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
 WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955
 12-5-63

DATE

20 Sept. 64

TIME	LAT	LONG	PRES WEA	VIS	SIP	DRY B	DEW PT	HUMO/0	TH SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100															
0200															
0300															
0400															
0500															
0600															
0700															
0800															
0900	25° 43'N	171-45W	Few clds												
1000	25 39'N	171-36W	1022	15	1022	82	71	69	3	2	090-5-4	82	108	090	116 9.5
1100	25 35'N	171-27W	1022	12	1022	82	71	69	3	2	090-5-4	82	10	090	116 9.5
1200	25 31'N	171-17W	1022	15	1022	82	71	69	3	2	090-5-4	82	10	090	116 9.5
1300	25-27N	171-08W	"	15	1020	81	70	72	2	0	090-5-4	82	8	060	116 9.5
1400	25-23N	170-59W	"	15	1019	81	70	72	3	1	090-5-4	82	8	060	116 9.5
1500	25-18N	170-40W	"	15	1019	81	70	72	2	0	090-5-4	82	8	060	116 9.5
1600	25-4N	170-34W	"	15	1014	81	70	72	2	0	090-5-4	81	7	060	116 9.5
1700	25-11N	170-29W	"	15	1014	80	70	75	3	1	090-5-4	81	7	060	109 9.5
1800	25-03N	170-19W	Clouds	10	1019	80	70	75	4	2	090-5-4	81	7	060	109 9.5
1900	25-00N	170-09W	"	8	1019	80	70	75	4	2	090-5-4	81	7	060	109 9.5
2000	25-02N	169-55W	"	8	1020	80	70	75	3	3	090-5-5	81	8	070	110 9.5
2100	25-00N	169-50W	Few clds	15	1020	80	70	75	3	3	090-5-5	81	8	070	110 9.5
2200	24-57N	169-40W	"	15	1020	80	70	75	3	3	090-5-5	81	8	070	110 9.5
2300	24-53N	169-30W	"	15	1020	80	70	75	3	3	090-5-5	81	8	070	110 9.5
2400	24-50N	169-20W	"	15	1020	70	70	75	3	3	090-5-5	81	8	070	110 9.5

REMARKS:

XRAY

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955

12-5-63

DATE 21 Sept. 1964

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM ₁₀	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	24-44' N	169-07' W	PTLg Cloudy	15	1018	79	72	75	8	6	090-5-4	81	8	250	109 10 k
0200	24-42' N	168-55' W	20 10 4	15	1018	79	70	75	7	6	090-5-4	81	7	050	109 10 k
0300	24-39' N	168-46' W	" 10	15	1017	79	72	75	7	6	090-5-4	81	7	045	109 10 k
0400	24-36' N	168-34' W	O'cast	15	1017	79	72	75	9	5	090-5-4	81	7	050	109 10 k
0500	24-33' N	168-26' W	PTLg Cloudy	8	1020	79	73	79	4	2	090-5-4	81	7	030	110 10 k
0600	24-28' N	168-15' W	" 6	10	1020	79	73	79	4 1	2	090-5-4	81	7	050	110 10 k
0700	24-23' N	168-06' W	"	15	1020	79	73	79	4	0	090-5-4	81	7	050	110 10 k
0800	24-21' N	167-52' W	Cloudy	10	1018	80	73	79	8	8	090-5-4	80	10	030	112 10 k
0900	24-18' N	167-41' W	" 10	1018	80	73	79	8	8	090-5-4	80	10	030	112 10 k	
1000	24-14' N	167-31' W	" 10	1017	80	73	79	8	8	090-5-4	80	10	030	112 10 k	
1100	24-10' N	167-21' W	" 10	1017	80	73	79	8	8	090-5-4	80	10	030	112 10 k	
1200	24-06' N	167-10' W	" 10	1017	80	73	79	8	8	090-5-4	80	10	030	112 10 k	
1300	24-02' N	167-01' W	" 10	1015	80	73	79	7	5	090-5-4	80	10	040	112 10 k	
1400	24-00' N	166-52' W	" 10	1014	80	73	79	6	5	090-5-4	80	5	040	112 10 k	
1500	23-56' N	166-42' W	" 10	1014	80	73	79	5	6	090-5-4	80	5	040	112 10 k	
1600	23-46' N	166-31' W	" 10	1013	80	73	79	8	6	090-5-4	80	5	030	112 10 k	
1700	23-42' N	166-25' W	Cloudy	15	1014	82	77	84	7	3	090-5-4	80	5	000	131 10 k
1800	23-35' N	166-18' W	" 15	1014	82	77	84	8	3	090-5-4	81	5	000	132 10 k	
1900	23-31' N	166-07' W	" 15	1014	82	77	84	9	3	090-5-4	80	5	045	132 10 k	
2000	23-27' N	165-51' W	" 8	1014	80	74	82	9	2	090-5-4	80	5	045	132 10 k	
2100	23-22' N	165-46' W	O'cast	10	1014	77	73	87	9	6	090-5-4	80	10	090	111 10 k
2200	23-18' N	165-36' W	W.S.W.	10	1014	77	73	87	9	7	090-5-4	80	10	090	111 10 k
2300	23-15' N	165-26' W	Scattered	10	1014	77	73	87	9	7	090-5-4	80	10	120	111 10 k
2400	23-11' N	165-16' W	—	10	1014	77	73	87	9	7	090-5-4	80	10	120	111 10 k

REMARKS:

Rain Squalls 23.

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955
12-5-63

DATE 26 Sept. 1964

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM% O	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	23-10 N	165-06 W	1014	12	1014	77	74	87	9	7	090-6-3	80	7	170	111 10 kts
0200	23-06 N	164-56 W	Cloudy	10	1014	77	74	87	9	8	090-6-3	80	7	170	111 9.5 kts
0300	23-02 N	164-16 W	" "	12	1014	78	72	83	9	7	090-6-3	80	8	140	113 9.5 kts
0400	22-58 N	164-36 W	Cloudy	12	1014	78	72	83	8	7	090-6-3	80	8	170	113 9.5 kts
0500	22-54 N	164-26 W	"	8	1019	79	70	75	6	1	090-6-4	80	8	110	112 9.5 kts
0600	22-51 N	164-17 W	"	8	1014	79	70	75	6	0	090-6-4	80	8	110	112 9.5 kts
0700	22-47 N	164-07 W	Partly	15	1014	80	73	79	5	0	090-6-4	80	8	110	112 9.5 kts
0800	22-44 N	163-59 W	"	15	1014	80	73	79	4	0	090-6-4	80	8	110	112 9.5 kts
0900	22-40 N	163-45 W	"	15	1013	81	73	79	3	2	090-6-3	80	10	140	112 10 kts
1000	22-36 N	163-35 W	"	12	1015	81	73	79	3	2	090-6-3	80	10	140	112 10 kts
1100	22-32 N	163-25 W	"	12	1015	81	73	79	3	2	090-6-3	80	10	140	112 10 kts
1200	22-28 N	163-14 W	"	12	1015	81	73	79	3	2	090-6-3	80	10	140	112 10 kts
1300	22-25 N	163-05 W	"	20	1015	83	71	66	3	2	090-6-3	80	7	130	111 9 kts
1400	22-22 N	162-56 W	"	20	1014	85	74	67	3	1	090-6-5	80	Variable	111 9 kts	
1500	22-18 N	162-48 W	"	20	1013	85	74	67	3	1	090-6-5	80	"	111 9 kts	
1600	22-15 N	162-39 W	"	20	1013	85	74	67	4	4	090-2-6	81	11	111 9 kts	
1700	22-12 N	162-29 W	"	20	1013	82	72	75	6	5	090-2-6	80	4	070	111 9 kts
1800	22-08 N	162-20 W	"	20	1014	80	73	79	6	5	090-2-6	80	4	070	111 9 kts
1900	22-05 N	162-11 W	8	8	1014	80	73	79	0	0	090-5-6	80	3	—	111 9 kts
2000	22-03 N	162-02 W	"	8	1014	80	73	79	0	0	090-5-6	80	3	—	111 9 kts
2100	21-58 N	161-52 W	"	15	1013	80	73	79	0	0	090-5-6	80	3	—	111 9 kts
2200	21-55 N	161-44 W	"	15	1013	80	73	79	0	0	090-5-6	80	3	—	111 9 kts
2300	21-52 N	161-34 W	"	15	1013	80	73	79	0	0	090-5-6	80	3	—	111 9 kts
2400	21-50 N	161-29 W	"	15	1013	80	73	79	0	0	090-5-6	80	3	—	111 9 kts

REMARKS:

XRAY

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955
12-5-63

DATE

23 Sept. 1964

TIME	LAT	LONG	PRES WEA	VIS	SIP	DRY P	DEW PT	HUM%	TY. SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SEEP COURSE/SPD.
0100	21-47 N	161-21 W	1013	15	1013	78	71	79	1	0	590-5-3	80	Calm	110	8 kn
0200	21-45 N	161-15 W	1013	15	1013	78	71	79	1	0	590-5-3	80	Calm	110	8 kn
0300	21-42 N	161-07 W	1013	15	1013	78	71	79	1	0	590-5-3	80	Calm	110	8 kn
0400	21-39 N	160-59	1013	15	1013	78	71	79	1	0	590-5-3	81	Calm	110	8 kn
0500	21-36 N	160-51 W	1013	6 4	8	1013	79	73	10	9	090-5-4	81	5	110	8 kn
0600	21-33 N	160-43 W	1013	6 4	8	1014	80	73	10	9	090-5-3	81	5	110	8 kn
0700	21-30 N	160-35 W	0'CAS	10	1014	80	73	82	10	9	090-5-3	81	5	110	8 kn
0800	21-28 N	160-26 W	"	10	1014	80	73	82	10	9	090-5-3	81	5	110	096
0900	21-23 N	160-18 W	"	10	1014	80	73	82	10	9	090-5-3	81	5	110	096
1000	21-27 N	160-09 W	"	10	1014	80	73	82	10	9	090-5-3	81	5	110	096
1100	21-27 N	159-59 W	"	10	1014	80	73	82	10	9	090-5-3	81	5	110	096
1200	21-26 N	159-51 W	"	10	1014	80	72	83	10	7	090-5-3	81	5	110	096
1300	21-25 N	159-44 W	"	15	1013	82	74	76	9	7	090-5-3	81	6	130	6.0 kn
1400	21-25 N	159-38 W	"	15	1013	82	74	76	9	7	090-5-3	81	10	135	2.0 kn
1500	21-25 N	159-32 W	"	15	1012	82	74	76	9	7	090-5-3	81	10	150	0.9 kn
1600	21-24 N	159-26 W	"	15	1012	82	74	76	8 1	6	090-5-3	81	10	140	0.9 kn
1700	21-23 N	159-21	"	15	1012	80	74	83	9	6	090-5-3	80	10	140	0.9 kn
1800	21-22 N	159-16 W	"	15	1012	80	74	83	9	6	090-5-3	80	11	140	0.0
1900	21-22 N	159-08 W	"	8	1012	78	73	83	9	5	090-5-2	80	11	140	0.0
2000	21-20 N	159-02 W	"	8	1013	80	73	79	9	5	090-5-3	70	11	140	0.0
2100	21-20 N	159-55 W	FEW CLOUDS	15	1013	80	73	79	3	2	090-5-3	80	3	110	6 kn
2200	21-19 N	158-48 W	"	15	1013	80	73	79	3	2	090-5-3	80	3	110	6 kn
2300	21-18 N	158-42 W	"	15	1013	80	73	79	3	2	090-5-3	70	3	110	6 kn
2400	21-17 N	158-37 W	"	15	1013	80	73	79	3	2	090-5-3	80	3	110	6 kn

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
 WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955
 12-5-63

DATE 4 Sept.

Time at HARBOR 0900

Time at sunrise = Position at sunrise =

Time at sunset 18 = 51 Position at sunset = 20-47N 159-20W

Miles traveled from 0000 hours to sunrise =

Miles traveled from HARBOR sunrise to sunset = 99

Miles traveled from sunset to 2400 hours = 57

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	1400	1000 ft sea	158-39W	20-58N
2.	1807	LOEAN	159-23	20-46
3.				
4.				
5.				
6.				

DATE 5 Sept. 1964

Time at sunrise = 0530 Position at sunrise = 19-58N 161-28W

Time at sunset = 1803 Position at sunset = 19-10. 163-18.

Miles traveled from 0000 hours to sunrise = 4271

Miles traveled from sunrise to sunset = 126.

Miles traveled from sunset to 2400 hours = 60

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0100	1000 ft sea	160-31W	20-30N
2.	0430	LOEAN	161-18W	20-03N
3.	0800	LOEAN 1000 ft	161°41'W	19°51'N
4.	1200-	" "	162-22W	19°35'N
5.	1500	" "	162-48W	19°2-3'N
6.				

DATE 6 Sept. 1964

Time at sunrise = 0541 Position at sunrise = $18^{\circ}27'N$ $165^{\circ}08'W$
 Time at sunset = 1818 Position at sunset = $17^{\circ}26'N$ $167^{\circ}25'W$
 Miles traveled from 0000 hours to sunrise = 57
 Miles traveled from sunrise to sunset = 121
 Miles traveled from sunset to 2400 hours = 57

TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1. 0000	Loran	$164^{\circ}15'W$	$18^{\circ}51'N$
2. 0709	LORAN	$165^{\circ}25'W$	$18^{\circ}17'N$
3. 1300	Loran-Loran	$166^{\circ}25'W$	$17^{\circ}51'N$
4. 2000	"	$167^{\circ}38'W$	$17^{\circ}21'N$
5. 0420	LORAN + φ	$168^{\circ}57'W$	$16^{\circ}49'N$
6.			

DATE 7 Sept. 1964

Time at sunrise = 0606 Position at sunrise = $16^{\circ}43'N$ $169^{\circ}12'W$
 Time at sunset = 1823 Position at sunset = $15^{\circ}04'N$ $169^{\circ}04'W$
 Miles traveled from 0000 hours to sunrise = 58
 Miles traveled from sunrise to sunset = 106
 Miles traveled from sunset to 2400 hours = 59

TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1. 0112	Loran	$168^{\circ}29'W$	$17^{\circ}02'N$
2. 0420	LORAN + φ	$168^{\circ}57'W$	$16^{\circ}49'N$
3. 0800	Loran	$169^{\circ}30'W$	$16^{\circ}40'N$
4. 1200 -	Loran + sun	$169^{\circ}18'W$	$16^{\circ}01'N$
5. 1500 -	"	$169^{\circ}13'W$	$15^{\circ}32'N$
6. 2100 -	LORAN	$168^{\circ}52'W$	$14^{\circ}38'N$
2200 -	"	$169^{\circ}09'W$	$14^{\circ}15'N$

DATE 8 Sept. 1964

Time at sunrise = 0600 Position at sunrise = 13-32N 169-58W
 Time at sunset = 1832 Position at sunset = 12-10N 171-21W.
 Miles traveled from 0000 hours to sunrise = 61
 Miles traveled from sunrise to sunset = 128
 Miles traveled from sunset to 2400 hours = 61

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0000			
2.	0803	8am Local	169-59W	13-23'N
3.	1107	" "	170-10W	12-57N
4.	1630	8pm	171-03W	12-16N
5.	0540	5am	170-57W	13-33N
6.	0			

DATE 9 Sept. 1964

Time at sunrise = 0612 Position at sunrise = 13-35N 170-57W
 Time at sunset = 1823 Position at sunset = 14-51N 169-30W
 Miles traveled from 0000 hours to sunrise = 60 MI
 Miles traveled from sunrise to sunset = 120
 Miles traveled from sunset to 2400 hours = 62

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.				13-33'
2.	0800	Local 8am	170-45W	13-43'
3.	1200	" "	170-18W	14-12N
4.	1300	" "	170-02W	14-26N
5.	1840	" "	169-24W	15-01'
6.	2100	" "	169-46W	15-025'

DATE 10 Sept. 1964

Time at sunrise = ~~0612~~ Position at sunrise = $14^{\circ}50'N$ $170^{\circ}52'W$

Time at sunset = ~~1834~~ Position at sunset = $13^{\circ}51'N$ $172^{\circ}27'W$

Miles traveled from 0000 hours to sunrise = 66 mi

Miles traveled from sunrise to sunset = 126 mi .

Miles traveled from sunset to 2400 hours = 65 mi

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0000	Locat.	$170^{\circ}03'W$	$15^{\circ}35'N$
2.	0600	Sta. 2	$170^{\circ}52'W$	$14^{\circ}49'N$
3.	1200	Sun, locat.	$171^{\circ}31'W$	$14^{\circ}08'N$
4.	1500	" "	$171^{\circ}56'W$	$13^{\circ}48'N$
5.	0633	Locat.	$172^{\circ}22'W$	$14^{\circ}33'N$
6.				

DATE 11 Sept. 1964

Time at sunrise ~~0612~~ ⁰⁶¹² Position at sunrise = $14^{\circ}30'N$ $172^{\circ}19'W$

Time at sunset = ~~1829~~ Position at sunset = $15^{\circ}47'N$ $171^{\circ}05'W$

Miles traveled from 0000 hours to sunrise = 67 mi .

Miles traveled from sunrise to sunset = ~~126 mi~~ ^{date} 101 mi

Miles traveled from sunset to 2400 hours = 48 mi

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0800	Locat. & Sta. 2	$171^{\circ}00'W$	$14^{\circ}38'N$
2.	1100	" "	$171^{\circ}54'W$	$14^{\circ}57'N$
3.	2000	" "	$170^{\circ}59'W$	$15^{\circ}56'N$
4.				
5.				
6.				

DATE 12 Sept 1964

Time at sunrise = 0614 Position at sunrise = 16-19 N. 171-43 W
Time at sunset = 1834 Position at sunset = 15-27 N 172-06 W
Miles traveled from 0000 hours to sunrise = 7.2 M
Miles traveled from sunrise to sunset = 108 M
Miles traveled from sunset to 2400 hours = 39 M

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0554.	STADS.	171-42 W	16-20 N.
2.	0800	Locat & Sust	171-49 W	16-17 N
3.	0930	" "	172-00 W	16-10 N
4.	1200	" "	172-22 W	15-48 N
5.	2000	"	173-17 W	14-55 N
6.	0550.	STADS.	172-55 W	15-37 N

DATE 13 Sept. 1964

Time at sunrise = 0623 Position at sunrise = 15-28 N 173-52 W
Time at sunset = 1834 Position at sunset = 16-37 N 172-37 W
Miles traveled from 0000 hours to sunrise = 66.
Miles traveled from sunrise to sunset = 107 M
Miles traveled from sunset to 2400 hours = 48 M

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0800	Locat & Sust	173-27 W	15-32 N
2.	1115	"	173-22 W	15-52 N
3.	2000	Locat	172-32 W	16-46 N
4.	2300	"	172-12 W	17-06 N
5.				
6.				

DATE 14 Sept 1964

Time at sunrise = 0616 Position at sunrise = $18^{\circ}04'N$ $171^{\circ}57'W$
 Time at sunset = 1830 Position at sunset = $19^{\circ}55'N$ $171^{\circ}56'W$
 Miles traveled from 0000 hours to sunrise = 6111.
 Miles traveled from sunrise to sunset = 112.11.
 Miles traveled from sunset to 2400 hours = 57

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0200	LoRa	$171^{\circ}58'W$	$17^{\circ}22'N$
2.	0617 Aug 0555	STARS & LORa	$171^{\circ}46'W$	$18^{\circ}02'N$
3.	0800	Navigation	$171^{\circ}00'W$	$18^{\circ}10'N$
4.	1000	"	$171^{\circ}58'W$	$18^{\circ}30'N$
5.	1200	" "	$171^{\circ}58'W$	$18^{\circ}49'N$
6.	1800	STARS	$171^{\circ}55'W$	$20^{\circ}00'N$

DATE 15 Sept. 1964

Time at sunrise = 0614 Position at sunrise = $21^{\circ}52'N$ $171^{\circ}55'W$
 Time at sunset = 1831 Position at sunset = $23^{\circ}48'N$ $171^{\circ}50'W$
 Miles traveled from 0000 hours to sunrise = 6211.
 Miles traveled from sunrise to sunset = 116.11.
 Miles traveled from sunset to 2400 hours = 63 miles

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0542	STARS	$171^{\circ}49'W$	$21^{\circ}43'N$
2.	0800	Navigation	$171^{\circ}53'W$	$22^{\circ}08'N$
3.	1030	" "	$171^{\circ}52'W$	$22^{\circ}47'N$
4.	1400	" "	$171^{\circ}52'W$	$23^{\circ}03'N$
5.	2000	" "	$171^{\circ}51'W$	$24^{\circ}01'N$
6.				

DATE 20 Sept 1964

Time at sunrise = ~~0600~~ ⁰⁸³⁰ Position at sunrise = 25-46' 171-45'W
Time at sunset = 1817 Position at sunset = 25-07N 170-15W
Miles traveled from 0000 hours to sunrise = 00
Miles traveled from ~~sunrise~~ to sunset = ^t 95
Miles traveled from sunset to 2400 hours = 53

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	1200	LORAN-C	171-17W	25-31N
2.				
3.				
4.				
5.				
6.				

DATE 21 SEPT 1964

Time at sunrise = 0602 Position at sunrise = 24-25N 168-15W
Time at sunset = 1801 Position at sunset = 23-35N 166-17W
Miles traveled from 0000 hours to sunrise = 62M
Miles traveled from sunrise to sunset = 124M
Miles traveled from sunset to 2400 hours = ~~60~~ 60 MILES

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0628		168-17W	24-26N
2.	0800	LORAN-C	167-52W	24-21N
3.	1600	LAND FIX	166-30W	23°49'N
4.	2000	LORAN	165-56W	23-26N
5.				
6.				

DATE 22 Sept. 1964

Time at sunrise = 0546 Position at sunrise = 22-51 N 164-19 W
 Time at sunset = 1745 Position at sunset = 22-09 N. 162-23 W
 Miles traveled from 0000 hours to sunrise = 58
 Miles traveled from sunrise to sunset = 445 MI. 114 M.
 Miles traveled from sunset to 2400 hours = 54 MILES.

TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1. 0514	STARS	164-24 W	22-54 N.
2. 0800	LOCMN	163-55 W	22-44 N
3. 1100	"	163-25 W	22-32 N
4. 1655	LOCMN	162-30 W	22-12 N
5. 2000	"	162-02 W	22-03 N
6.			

DATE 23 Sept. 1964

Time at sunrise = 0632 Position at sunrise = 21-31 N 160-40 W
 Time at sunset = 1833 Position at sunset = 21-24 N 159-12 W
 Miles traveled from 0000 hours to sunrise = 49 MI.
 Miles traveled from sunrise to sunset = 84 MI
 Miles traveled from sunset to 2400 hours = 34 MI

TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1. 0220	LOCMN	161° 13' W	21° 44' N
2. 0800	LOCMN	160-26 W	21° 28' N
3. 1100	"	159-58 W	21° 26' N
4. 2000	"	159-01 W	21-20 N
5. 2200	"	158-48 W	21-19 N
6.			

OUT OF GRID

SI-MNH-955a
3-4-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART A

DATE: 14 SEPTEMBER 64 Total Minutes: 734 Total Miles 112

I. Total Abundance of birds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>125</u>	<u>312</u>	<u>2.49</u>	<u>2.785</u>

II. Abundance of the Shearwater-Petrel-Albatross Group:

SHEAR-PET.			130			3.33			1.16					
No. Sightings	No. Birds		T	WT	P	B	T	WT	P	B				
<u>107</u>	<u>40</u>	<u>16</u>	<u>12</u>	<u>22</u>	<u>61</u>	<u>18</u>	<u>12</u>	<u>206</u>	<u>132</u>	<u>42</u>	<u>143</u>	<u>55</u>	<u>16</u>	<u>107</u>

III. Abundance of Tropicbirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile								
T	RT	WT	T	RT	WT	T	RT	WT			
<u>5</u>	<u>3</u>	<u>2</u>	<u>5</u>	<u>3</u>	<u>2</u>	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>	<u>0.47</u>	<u>0.28</u>	<u>0.15</u>

IV. Abundance of Terns:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>13</u>	<u>86</u>	<u>6.6</u>	<u>0.768</u>

V. Abundance of Shorebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

VI. Abundance of Boobys:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile								
T	BF	RF	B	T	BF	RF	B	T	BF	RF	B
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

VII. Abundance of Frigatebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

VIII. Abundance of Flocks:

Total No. Flocks	Total No. Birds	Total No. F/Mi.	No. Feeding Flocks	No. Feeding Birds	No. Feeding F/MI.
<u>8</u>	<u>119</u>	<u>0.0715</u>	<u>0</u>	<u>0</u>	<u>0</u>

SI-MNH-955a
3-4-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART A

DATE: 15 SEPTEMBER 64 Total Minutes: 737 Total Miles 116

I. Total Abundance of birds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>254</u>	<u>2770</u>	<u>10.30</u>	<u>23.28</u>

II. Abundance of the Shearwater-Petrel-Albatross Group:

SHEARWATER				PETREL				ALBATROSS			
No. Sightings	No. Birds	Birds/Sighting	Birds/Mile	No. Sightings	No. Birds	Birds/Sighting	Birds/Mile	No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
T	WT	P	B	T	WT	P	B	T	WT	P	B

<u>216</u>	<u>115</u>	<u>16</u>	<u>26</u>	<u>1294</u>	<u>470</u>	<u>19</u>	<u>32</u>	<u>830</u>	<u>429</u>	<u>1.18</u>	<u>1.23</u>	<u>1547</u>	<u>4.55</u>	<u>16</u>	<u>276</u>
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III. Abundance of Tropicbirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile									
T	RT	WT	T	RT	WT	T	RT	WT	T	RT	WT	
<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0.0</u>	<u>1.0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0.086</u>

IV. Abundance of Terns:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>26</u>	<u>923</u>	<u>35.08</u>	<u>83.88</u>

V. Abundance of Shorebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

VI. Abundance of Boobys:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile								
T	BF	RF	B	T	BF	RF	B	T	BF	RF	B

<u>0</u>											
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VII. Abundance of Frigatebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>1</u>	<u>2</u>	<u>2</u>	<u>0.017</u>

VIII. Abundance of Flocks:

Total No. Flocks	Total No. Birds	Total No. F/Mi.	No. Feeding Flocks	No. Feeding Birds	No. Feeding F/MI.
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<u>49</u>	<u>2375</u>	<u>47</u>	<u>1</u>	<u>25</u>	<u>0.000</u>
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D

SI-MNH-955a
3-4-64SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART ADATE: 20 SEPTEMBER 64 Total Minutes: 553 Total Miles 95

I. Total Abundance of birds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>142</u>	<u>774</u>	<u>5.45</u>	<u>8.47</u>

II. Abundance of the Shearwater-Petrel-Albatross Group:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile					
T	WT	P	B	T	WT	P	B	T	WT	P	B			
<u>90</u>	<u>52</u>	<u>19</u>	<u>14</u>	<u>323</u>	<u>274</u>	<u>2314</u>		<u>3.56</u>	<u>5.27</u>	<u>1.21</u>	<u>1.35</u>	<u>3.40</u>	<u>2.73</u>	<u>14.10</u>

III. Abundance of Tropicbirds:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	RT	WT	T	RT	WT	T	RT	WT	T	RT	WT
<u>2</u>	<u>1</u>	<u>0</u>	<u>2</u>	<u>1</u>	<u>0</u>	<u>1.0</u>	<u>1.0</u>	<u>0.0</u>	<u>0.21</u>	<u>0.11</u>	<u>0</u>

IV. Abundance of Terns:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>21</u>	<u>73</u>	<u>3.41</u>	<u>0.769</u>

V. Abundance of Shorebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>1</u>	<u>2</u>	<u>2.0</u>	<u>0.021</u>

VI. Abundance of Boobys:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	BF	RF	B	T	BF	RF	B	T	BF	RF	B
<u>6</u>	<u>1</u>	<u>3</u>	<u>0</u>	<u>7</u>	<u>1</u>	<u>3</u>	<u>0</u>	<u>1.6</u>	<u>1.0</u>	<u>0.01</u>	<u>0.32</u>

VII. Abundance of Frigatebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>9</u>	<u>362</u>	<u>40.77</u>	<u>8.16</u>

VIII. Abundance of Flocks:

Total Flocks	Total Birds	Total F/Mi.	No. Feeding Flocks	No. Feeding Birds	No. Feeding F/MI.
<u>3</u>	<u>153</u>	<u>0.052</u>	<u>1</u>	<u>11</u>	<u>0.074</u>

D

SI-MNH-955a
3-4-64SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART ADATE: 21 SEPTEMBER 64 Total Minutes: 719 Total Miles 124

I. Total Abundance of birds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>124</u>	<u>523</u>	<u>6.67</u>	<u>7.01</u>

II. Abundance of the Shearwater-Petrel-Albatross Group:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	WT	P	B	T	WT	P	B	T	WT	P	B
<u>63</u>	<u>44</u>	<u>5</u>	<u>2</u>	<u>505</u>	<u>46</u>	<u>10</u>	<u>2</u>	<u>2.98</u>	<u>10.81</u>	<u>1.25</u>	<u>10</u>

III. Abundance of Tropicbirds:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	RT	WT	T	RT	WT	T	RT	WT	T	RT	WT
<u>2</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>	<u>0.07</u>	<u>0.07</u>	<u>0.07</u>

IV. Abundance of Terns:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>26</u>	<u>770</u>	<u>10.38</u>	<u>2.17</u>

V. Abundance of Shorebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>1</u>	<u>1</u>	<u>1.0</u>	<u>0.0007</u>

VI. Abundance of Boobys:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	BF	RF	B	T	BF	RF	B	T	BF	RF	B
<u>12</u>	<u>4</u>	<u>5</u>	<u>1</u>	<u>21</u>	<u>6</u>	<u>10</u>	<u>1</u>	<u>1.61</u>	<u>1.50</u>	<u>1.30</u>	<u>1.0</u>

VII. Abundance of Frigatebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>19</u>	<u>30</u>	<u>1.63</u>	<u>.24</u>

VIII. Abundance of Flocks:

Total No. Flocks	Total No. Birds	Total No. F/Mi.	No. Feeding Flocks	No. Feeding Birds	No. Feeding F/MI.
<u>12</u>	<u>618</u>	<u>0.108</u>	<u>9</u>	<u>729</u>	<u>0.128</u>

D

SI-MNH-955a
3-4-64SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART ADATE: 22 SEPTEMBER 64 Total Minutes: 719 Total Miles 114

I. Total Abundance of birds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>123</u>	<u>682</u>	<u>5.52</u>	<u>5.96</u>

II. Abundance of the Shearwater-Petrel-Albatross Group:

No. Sightings				No. Birds				Birds/Sighting			Birds/Mile				
T	WT	P	B	T	WT	P	B	T	WT	P	B	T	WT	P	B
<u>13</u>	<u>29</u>	<u>8</u>	<u>29</u>	<u>52</u>	<u>29</u>	<u>10</u>	<u>35</u>	<u>0.50</u>	<u>17.55</u>	<u>1.25</u>	<u>1.20</u>	<u>5.11</u>	<u>4.46</u>	<u>0.88</u>	<u>1.307</u>

III. Abundance of Tropicbirds: (3-Tropicbirds seen)

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	RT	WT	T	RT	WT	T	RT	WT	T	RT	WT
<u>7</u>	<u>3</u>	<u>2</u>	<u>8</u>	<u>3</u>	<u>2</u>	<u>1.14</u>	<u>10</u>	<u>10</u>	<u>.07</u>	<u>.026</u>	<u>.0176</u>

IV. Abundance of Terns:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>14</u>	<u>74</u>	<u>5.28</u>	<u>0.65</u>

V. Abundance of Shorebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>6</u>	<u>6</u>	<u>1.0</u>	<u>0.053</u>

VI. Abundance of Boobys:

No. Sightings				No. Birds				Birds/Sighting			Birds/Mile				
T	BF	RF	B	T	BF	RF	B	T	BF	RF	B	T	BF	RF	B
<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>

VII. Abundance of Frigatebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>2</u>	<u>4</u>	<u>2.0</u>	<u>2.0352</u>

VIII. Abundance of Flocks:

Total No. Flocks	Total No. Birds	Total No. F/Mi.	No. Feeding Flocks	No. Feeding Birds	No. Feeding F/MI.
<u>4</u>	<u>526</u>	<u>1.051</u>	<u>3</u>	<u>526</u>	<u>0.0164</u>

D.

SI-MNH-955a
3-4-64SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART ADATE: 23 SEPTEMBER 64 Total Minutes: 721 Total Miles 84

I. Total Abundance of birds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>124</u>	<u>306</u>	<u>1.75</u>	<u>3.64</u>

II. Abundance of the Shearwater-Petrel-Albatross Group:

SHEAR - PET			116			1.68			1.64			.048			
No. Sightings	No. Birds		T	WT	P	B	T	WT	P	B	T	WT	P	B	
<u>124</u>	<u>50</u>	<u>1</u>	<u>4</u>	<u>175</u>	<u>54</u>	<u>1</u>	<u>4</u>	<u>1.41</u>	<u>1.08</u>	<u>1.0</u>	<u>1.0</u>	<u>.002</u>	<u>.64</u>	<u>.012</u>	<u>.048</u>

III. Abundance of Tropicbirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile								
T	RT	WT	T	RT	WT	T	RT	WT	T	RT	WT
<u>1</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>1.0</u>	<u>0</u>	<u>1.0</u>	<u>.012</u>	<u>0</u>	<u>.012</u>

IV. Abundance of Terns:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>.73</u>	<u>103</u>	<u>3.12</u>	<u>1.23</u>

V. Abundance of Shorebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>0</u>	<u>0</u>	<u>0.0</u>	<u>0.000</u>

VI. Abundance of Boobys:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile											
T	BF	RF	B	T	BF	RF	B	T	BF	RF	B			
<u>15</u>	<u>2</u>	<u>7</u>	<u>5</u>	<u>26</u>	<u>9</u>	<u>7</u>	<u>7</u>	<u>1.73</u>	<u>4.50</u>	<u>1.10</u>	<u>1.40</u>	<u>31</u>	<u>.107</u>	<u>.003</u>

VII. Abundance of Frigatebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>1</u>	<u>1</u>	<u>1.0</u>	<u>.013</u>

VIII. Abundance of Flocks:

Total No. Flocks	Total No. Birds	Total No. F/Mi.	No. Feeding Flocks	No. Feeding Birds	No. Feeding F/MI.
<u>1</u>	<u>52</u>	<u>.012</u>	<u>1</u>	<u>52</u>	<u>.012</u>

SI-MNH-955a
3-4-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART A

DATE: 4 SEPTEMBER 64 Total Minutes: 591 Total Miles 99

I. Total Abundance of birds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>104</u>	<u>759</u>	<u>7.29</u>	<u>7.592</u>

II. Abundance of the Shearwater-Petrel-Albatross Group:

Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	WT	P	B	T	WT	P	B	T	WT	P	B
<u>85</u>	<u>68</u>	<u>0</u>	<u>0</u>	<u>232</u>	<u>714</u>	<u>0</u>	<u>0</u>	<u>8.61</u>	<u>10.50</u>	<u>0</u>	<u>0</u>

III. Abundance of Tropicbirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile								
T	RT	WT	T	RT	WT	T	RT	WT			
<u>5</u>	<u>2</u>	<u>3</u>	<u>5</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>0.57</u>	<u>0.57</u>	<u>0.57</u>

IV. Abundance of Terns:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>11</u>	<u>18</u>	<u>1.63</u>	<u>1.18</u>

V. Abundance of Shorebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

VI. Abundance of Boobys:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile								
T	BF	RF	B	T	BF	RF	B	T	BF	RF	B
<u>2</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>3</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>150</u>	<u>0</u>	<u>1</u>	<u>1.52</u>

VII. Abundance of Frigatebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

VIII. Abundance of Flocks:

Total No. Flocks	Total No. Birds	Total No. F/Mi.	No. Feeding Flocks	No. Feeding Birds	No. Feeding F/MI.
<u>3</u>	<u>639</u>	<u>10.5</u>	<u>1</u>	<u>600</u>	<u>10.5</u>

A

SI-MNH-955a
3-4-64SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART ADATE: 5 SEPTEMBER 64 Total Minutes: 153 Total Miles 126

I. Total Abundance of birds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>142</u>	<u>250</u>	<u>1.76</u>	<u>2</u>

II. Abundance of the Shearwater-Petrel-Albatross Group:

SHEAR-PET.

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	WT	P	B	T	WT	P	B	T	WT	P	B
<u>122</u>	<u>50</u>	<u>1</u>	<u>14</u>	<u>200</u>	<u>118</u>	<u>1</u>	<u>14</u>	<u>1.63</u>	<u>2.36</u>	<u>1.0</u>	<u>1.0</u>
								<u>1.17</u>	<u>0.53</u>	<u>0.53</u>	<u>0.53</u>

III. Abundance of Tropicbirds:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	RT	WT	T	RT	WT	T	RT	WT	T	RT	WT
<u>3</u>	<u>3</u>	<u>0</u>	<u>3</u>	<u>3</u>	<u>0</u>	<u>1.0</u>	<u>1.0</u>	<u>0</u>	<u>.024</u>	<u>.024</u>	<u>0</u>

IV. Abundance of Terns:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
<u>7</u>			<u>35</u>			<u>5.0</u>			<u>0.28</u>		

V. Abundance of Shorebirds:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
<u>0</u>			<u>0</u>			<u>0</u>			<u>0</u>		

VI. Abundance of Boobys:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	BF	RF	B	T	BF	RF	B	T	BF	RF	B
<u>4</u>	<u>1</u>	<u>3</u>	<u>0</u>	<u>4</u>	<u>1</u>	<u>3</u>	<u>0</u>	<u>1.0</u>	<u>1.0</u>	<u>0</u>	<u>0</u>
								<u>1.0</u>	<u>1.0</u>	<u>0</u>	<u>0</u>

VII. Abundance of Frigatebirds:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
<u>6</u>			<u>8</u>			<u>1.53</u>			<u>0.125</u>		

VIII. Abundance of Flocks:

Total No. Flocks	Total No. Birds	Total No. F/Mi.	No. Feeding Flocks	No. Feeding Birds	No. Feeding F/MI.
<u>4</u>	<u>77</u>	<u>0.03</u>	<u>0</u>	<u>0</u>	<u>0</u>

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SI-MNH-955a
3-4-64SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART ADATE: 6 SEPTEMBER 64 Total Minutes: 738 Total Miles 121

I. Total Abundance of birds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>81</u>	<u>157</u>	<u>1.93</u>	<u>1.3</u>

II. Abundance of the Shearwater-Petrel-Albatross Group:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile						
T	WT	P	B	T	WT	P	B	T	WT	P	B				
<u>56</u>	<u>28</u>	<u>6</u>	<u>13</u>	<u>87</u>	<u>54</u>	<u>6</u>	<u>17</u>	<u>1.55</u>	<u>1.92</u>	<u>1</u>	<u>1.30</u>	<u>.72</u>	<u>.45</u>	<u>.85</u>	<u>.14</u>

III. Abundance of Tropicbirds:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	RT	WT	T	RT	WT	T	RT	WT	T	RT	WT
<u>2</u>	<u>1</u>	<u>0</u>	<u>2</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>.06</u>	<u>.008</u>	<u>0</u>

IV. Abundance of Terns:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>15</u>	<u>120</u>	<u>8.0</u>	<u>1.0</u>

V. Abundance of Shorebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>3</u>	<u>3</u>	<u>1</u>	<u>.024</u>

VI. Abundance of Boobys:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile				
T	BF	RF	B	T	BF	RF	B	T	BF	RF	B		
<u>2</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>.616</u>	<u>0</u>	<u>.616</u>	<u>0</u>

VII. Abundance of Frigatebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>2</u>	<u>2</u>	<u>1</u>	<u>.016</u>

VIII. Abundance of Flocks:

Total No. Flocks	Total No. Birds	Total No. F/Mi.	No. Feeding Flocks	No. Feeding Birds	No. Feeding F/MI.
<u>7</u>	<u>128</u>	<u>.051</u>	<u>2</u>	<u>81</u>	<u>.016</u>

SI-MNH-955a
3-4-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART A

DATE: 7 SEPTEMBER 64 Total Minutes: 114 Total Miles 17

1. Total Abundance of birds:

<u>No. Sightings</u>	<u>No. Birds</u>	<u>Birds/Sighting</u>	<u>Birds/Mile</u>
36	47	1.306	2.165

II. Abundance of the Shearwater-Petrel-Albatross Group:

No. Sightings				No. Birds				Birds/Sighting				Birds/Mile			
T	WT	P	B	T	WT	P	B	T	WT	P	B	T	WT	P	B
17	17	0	0	17	17	0	0	1	1	0	0	1	1	0	0

III. Abundance of Tropicbirds:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	RT	WT	T	RT	WT	T	RT	WT	T	RT	WT

IV. Abundance of Terns:

<u>No. Sightings</u>	<u>No. Birds</u>	<u>Birds/Sighting</u>	<u>Birds/Mile</u>
10	16	1.60	.94

V. Abundance of Shorebirds:

<u>No. Sightings</u>	<u>No. Birds</u>	<u>Birds/Sighting</u>	<u>Birds/Mile</u>
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VI. Abundance of Boobys

No. Sightings				No. Birds				Birds/Sighting				Birds/Mile			
T	BF	RF	B	T	BF	RF	B	T	BF	RF	B	T	BF	RF	B
1	0	0	1	1	0	0	1	1	0	0	1	0	0	0	0

VII. Abundance of Frigatebirds:

<u>No. Sightings</u>	<u>No. Birds</u>	<u>Birds/Sighting</u>	<u>Birds/Mile</u>
7	10	1.43	0.6

VIII. Abundance of Flocks:

Total No. Flocks	Total No. Birds	Total No. F/Mi.	No. Feeding Flocks	No. Feeding Birds	No. Feeding F/MI.
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SI-MNH-955a
3-4-64SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART ADATE: 7 SEPTEMBER 64 Total Minutes: 618 Total Miles 98

I. Total Abundance of birds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>55</u>	<u>114</u>	<u>1.96</u>	<u>1.16</u>

II. Abundance of the Shearwater-Petrel-Albatross Group:

SHEARWATER						PETREL						ALBATROSS									
No. Sightings	No. Birds			Birds/Sighting			Birds/Mile			No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	WT	P	B	T	WT	P	B	T	WT	P	B	T	WT	P	B	T	WT	P	B		
<u>36</u>	<u>23</u>	<u>2</u>	<u>4</u>	<u>44</u>	<u>35</u>	<u>2</u>	<u>4</u>	<u>122</u>	<u>125</u>	<u>1</u>	<u>1</u>	<u>45</u>	<u>36</u>	<u>0</u>	<u>0</u>	<u>34</u>	<u>36</u>	<u>0</u>	<u>0</u>		

III. Abundance of Tropicbirds:

No. Sightings	No. Birds			Birds/Sighting			Birds/Mile				
T	RT	WT	T	RT	WT	T	RT	WT	T	RT	WT
<u>3</u>	<u>2</u>	<u>0</u>	<u>3</u>	<u>2</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>45</u>	<u>0</u>	<u>0</u>

IV. Abundance of Terns:

No. Sightings	No. Birds			Birds/Sighting			Birds/Mile		
<u>14</u>	<u>54</u>	<u>5</u>	<u>1.85</u>	<u>5.5</u>					

V. Abundance of Shorebirds:

No. Sightings	No. Birds			Birds/Sighting			Birds/Mile		
<u>1</u>	<u>7</u>	<u>7</u>	<u>0.071</u>						

VI. Abundance of Boobys:

No. Sightings	No. Birds			Birds/Sighting			Birds/Mile				
T	BF	RF	B	T	BF	RF	B	T	BF	RF	B
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

VII. Abundance of Frigatebirds:

No. Sightings	No. Birds			Birds/Sighting			Birds/Mile		
<u>1</u>	<u>5</u>	<u>3</u>	<u>1.00</u>						

VIII. Abundance of Flocks:

Total No. Flocks	Total No. Birds	Total No. F/Mi.	No. Feeding Flocks	No. Feeding Birds	No. Feeding F/MI.
<u>2</u>	<u>42</u>	<u>10</u>	<u>0</u>	<u>0</u>	<u>0</u>

3

SI-MNH-955a
3-4-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART A

DATE: 8 SEPTEMBER 64 Total Minutes: 744 Total Miles 12.8

1. Total Abundance of birds:

<u>No. Sightings</u>	<u>No. Birds</u>	<u>Birds/Sighting</u>	<u>Birds/Mile</u>
46	155	3.336	6.2

II. Abundance of the Shearwater-Petrel-Albatross Group:

No. Sightings				No. Birds				Birds/Sighting				Birds/Mile			
T	WT	P	B	T	WT	P	B	T	WT	P	B	T	WT	P	B

36 9 17 3 50 14 26 3 1.38 1.55 1.52 1 40 11 20 624

III. Abundance of Tropicbirds:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	RT	WT	T	RT	WT	T	RT	WT	T	RT	WT
1	2	5	1	2	3	1	1	1	0.3	0.15	0.15

IV. Abundance of Terns:

<u>No. Sightings</u>	<u>No. Birds</u>	<u>Birds/Sighting</u>	<u>Birds/Mile</u>
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V. Abundance of Shorebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
0	0	0	0

VI. Abundance of Boobys:

No. Sightings				No. Birds				Birds/Sighting				Birds/Mile			
T	BF	RF	B	T	BF	RF	B	T	BF	RF	B	T	BF	RF	E

<u>No. Sightings</u>	<u>No. Birds</u>	<u>Birds/Sighting</u>	<u>Birds/Mile</u>
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VIII Abundance of Flocks

Total Flocks	Total Birds	Total F/Mi.	No. Feeding Flocks	No. Feeding Birds	No. Feeding F/MI.
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SI-MNH-955a
3-4-64SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART ADATE: 9 SEPTEMBER 64 Total Minutes: 731 Total Miles 120

I. Total Abundance of birds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>157</u>	<u>230</u>	<u>1.46</u>	<u>1.90</u>

II. Abundance of the Shearwater-Petrel-Albatross Group:

SHEARWATER-PETREL				ALBATROSS				MIXED					
No. Sightings	No. Birds	Birds/Sighting	Birds/Mile	T	WT	P	B	T	WT	P	B		
<u>142</u>	<u>24</u>	<u>9</u>	<u>203</u>	<u>25</u>	<u>10</u>	<u>1.42</u>	<u>1</u>	<u>124</u>	<u>11</u>	<u>1.70</u>	<u>03</u>	<u>2D8</u>	<u>M3</u>

III. Abundance of Tropicbirds: 1-Tropicbird

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile							
T	RT	WT	T	RT	WT	T	RT	WT		
<u>3</u>	<u>1</u>	<u>1</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>0.005</u>	<u>0.008</u>

IV. Abundance of Terns: 1-Tern

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>11</u>	<u>23</u>	<u>2.09</u>	<u>.17</u>

V. Abundance of Shorebirds:

SHOREBIRDS			
No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

VI. Abundance of Boobys:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile								
T	BF	RF	B	T	BF	RF	B	T	BF	RF	B

0 0 0 0 0 0 0 0 0 0 0 0

VII. Abundance of Frigatebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

VIII. Abundance of Flocks:

Total No. Flocks	Total No. Birds	Total No. F/Mi.	No. Feeding Flocks	No. Feeding Birds	No. Feeding F/MI.
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2 10 0.903 0 0 0

B

SI-MNH-955a
3-4-64SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART ADATE: 10 SEPTEMBER 64 Total Minutes: 744 Total Miles 126

I. Total Abundance of birds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>316</u>	<u>542</u>	<u>1.75</u>	<u>4.30</u>

II. Abundance of the Shearwater-Petrel-Albatross Group:

SHEAR - PET			153			1.71			3.69						
No. Sightings	No. Birds		T	WT	P	B	T	WT	P	B	T	WT	P	B	
<u>306</u>	<u>11</u>	<u>36</u>	<u>5</u>	<u>511</u>	<u>14</u>	<u>39</u>	<u>5</u>	<u>166</u>	<u>1.27</u>	<u>1.02</u>	<u>1</u>	<u>4.06</u>	<u>11</u>	<u>31</u>	<u>0</u>

III. Abundance of Tropicbirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile								
T	RT	WT	T	RT	WT	T	RT	WT	T	RT	WT
<u>2</u>	<u>3</u>	<u>0</u>	<u>2</u>	<u>2</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

IV. Abundance of Terns:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>8</u>	<u>29</u>	<u>3.60</u>	<u>.73</u>

V. Abundance of Shorebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>

VI. Abundance of Boobys:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile								
T	BF	RF	B	T	BF	RF	B	T	BF	RF	B
<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

VII. Abundance of Frigatebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

VIII. Abundance of Flocks:

Total No. Flocks	Total No. Birds	Total No. F/Mi.	No. Feeding Flocks	No. Feeding Birds	No. Feeding F/MI.
<u>2</u>	<u>46</u>	<u>815</u>	<u>0</u>	<u>0</u>	<u>0</u>

B

SI-MNH-955a
3-4-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART A

DATE: 11 SEPTEMBER 64 Total Minutes: 737 Total Miles 101

I. Total Abundance of birds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>237</u>	<u>585</u>	<u>1.61</u>	<u>5.85</u>

II. Abundance of the Shearwater-Petrel-Albatross Group:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	WT	P	B	T	WT	P	B	T	WT	P	B
<u>232</u>	<u>14</u>	<u>31</u>	<u>3</u>	<u>377</u>	<u>17</u>	<u>40</u>	<u>3</u>	<u>162</u>	<u>121</u>	<u>17</u>	<u>1</u>

III. Abundance of Tropicbirds:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	RT	WT	T	RT	WT	T	RT	WT	T	RT	WT
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

IV. Abundance of Terns:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>5</u>	<u>9</u>	<u>1.80</u>	<u>2.09</u>

V. Abundance of Shorebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

VI. Abundance of Boobys:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	BF	RF	B	T	BF	RF	B	T	BF	RF	B
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

VII. Abundance of Frigatebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

VIII. Abundance of Flocks:

Total No. Flocks	Total No. Birds	Total No. F/Mi.	No. Feeding Flocks	No. Feeding Birds	No. Feeding F/MI.
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

SI-MNH-955a
3-4-64SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART ADATE: 12 SEPTEMBER 64 Total Minutes: 742 Total Miles 108

I. Total Abundance of birds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>109</u>	<u>616</u>	<u>5.6</u>	<u>5.70</u>

II. Abundance of the Shearwater-Petrel-Albatross Group:

SHEAR-PET						4.92									
No. Sightings			No. Birds			Birds/Sighting			Birds/Mile						
T	WT	P	B	T	WT	P	B	T	WT	P	B				
<u>89</u>	<u>29</u>	<u>16</u>	<u>4</u>	<u>377</u>	<u>155</u>	<u>25</u>	<u>4</u>	<u>4.23</u>	<u>5.24</u>	<u>1.36</u>	<u>1.0</u>	<u>3.5</u>	<u>1.8</u>	<u>2.3</u>	<u>.037</u>

III. Abundance of Tropicbirds:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	RT	WT	T	RT	WT	T	RT	WT	T	RT	WT
<u>4</u>	<u>3</u>	<u>1</u>	<u>4</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>1.0</u>	<u>1.0</u>	<u>.07</u>	<u>.07</u>	<u>.009</u>

IV. Abundance of Terns:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>12</u>	<u>231</u>	<u>19.25</u>	<u>2.14</u>

V. Abundance of Shorebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>3</u>	<u>3</u>	<u>1.0</u>	<u>0.527</u>

VI. Abundance of Boobys:

No. Sightings				No. Birds				Birds/Sighting			Birds/Mile		
T	BF	RF	B	T	BF	RF	B	T	BF	RF	B		
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>		

VII. Abundance of Frigatebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>1</u>	<u>1</u>	<u>1.0</u>	<u>0.001</u>

VIII. Abundance of Flocks:

Total No. Flocks	Total No. Birds	Total No. F/Mi.	No. Feeding Flocks	No. Feeding Birds	No. Feeding F/MI.
<u>12</u>	<u>429</u>	<u>.113</u>	<u>2</u>	<u>268</u>	<u>0.016</u>

B

SI-MNH-955a
3-4-64SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART ADATE: 13 SEPTEMBER 64 Total Minutes: 731 Total Miles 107

I. Total Abundance of birds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>123</u>	<u>182</u>	<u>1.48</u>	<u>1.70</u>

II. Abundance of the Shearwater-Petrel-Albatross Group:

SHEAR - PET. 76 124 163 1.16

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile						
T	WT	P	B	T	WT	P	B	T	WT	P	B				
<u>104</u>	<u>16</u>	<u>9</u>	<u>3</u>	<u>182</u>	<u>156</u>	<u>103</u>	<u>1.0</u>	<u>125</u>	<u>925</u>	<u>111</u>	<u>1.0</u>	<u>146</u>	<u>18</u>	<u>0.92</u>	<u>0.27</u>

III. Abundance of Tropicbirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile								
T	RT	WT	T	RT	WT	T	RT	WT			
<u>4</u>	<u>4</u>	<u>0</u>	<u>4</u>	<u>4</u>	<u>0</u>	<u>1.0</u>	<u>1.0</u>	<u>0</u>	<u>0.37</u>	<u>0.37</u>	<u>0</u>

IV. Abundance of Terns:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>15</u>	<u>22</u>	<u>1.46</u>	<u>0.2056</u>

V. Abundance of Shorebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

VI. Abundance of Boobys:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile								
T	BF	RF	B	T	BF	RF	B	T	BF	RF	B
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

VII. Abundance of Frigatebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

VIII. Abundance of Flocks:

Total No. Flocks	Total No. Birds	Total No. F/Mi.	No. Feeding Flocks	No. Feeding Birds	No. Feeding F/MI.
<u>1</u>	<u>8</u>	<u>0.0001</u>	<u>0</u>	<u>0</u>	<u>0</u>

DATE

14 Sept. 64

TIME	LAT	LONG	PRES WEA	VIS	SIP	DRY P	DEW PT	HUMO/	TR SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100															
0200															
0300															
0400															
0500															
0600															
0700															
0800															
0900	LEAVE -	MONDOULU HARBOR													
1000	21° 15' N	157° 56' W	FEW	Clouds	20	1017	83	72	65	4	4	290-5-6	80	22	090 245° 10.5 KTS
1100	21° 11' N	157° 09' W	"	"	20	1002	83	72	65	4	4	090-5-6	80	22	090 247° 10.5 KTS
1200	21° 07' N	158° 16' W	"	"	20	1002	83	72	65	4	4	090-5-6	80	22	090 247° 10.5 KTS
1300	21° 03' N	158° 29' W	"	"	20	1016	83	75	80	2	2	290-5-6	80	17	090 247° 10.5 KTS
1400	20° 58' N	158° 39' W	"	"	20	1014	82	75	80	1	2	290-5-6	80	15	100 247° 10.5 KTS
1500	20° 55' N	158° 55' W	"	"	20	1013	82	75	80	1	2	120-5-5	80	13	100 247° 10.5 KTS
1600	20° 51' N	159° 01' W	"	"	20	1013	82	75	80	1	0	120-5-5	81	12	100 247° 10.5 KTS
1700	20° 49' N	159° 12' W	"	"	20	1013	82	76	80	1	0	020-4-5	81	12	100 246° 10.5 KTS
1800	20° 46' N	159° 23' W	"	"	20	1014	82	76	82	1	1	020-4-5	81	12	100 245° 10.5 KTS
1900	20° 42' N	159° 33' W	"	"	15	1014	82	79	79	63	1	120-4-5	81	10	100 245° 10.5 KTS
2000	20° 38' N	159° 44' W	"	"	20	1013	82	79	76	3	2	120-5-5	81	10	100 247° 10.5 KTS
2100	20° 36' N	159° 51' W	"	"	20	1012	82	79	79	3	2	120-5-5	81	10	100 247° 10.5 KTS
2200	20° 34' N	159° 58' W	"	"	20	1012	82	79	79	3	1	120-5-5	81	10	100 247° 10.5 KTS
2300	20° 30' N	160° 01' W	"	"	20	1011	82	79	79	3	1	120-5-5	81	10	100 247° 10.5 KTS
2400	20° 25' N	160° 21' W	"	"	20	1011	80	75	79	3	1	120-5-5	81	10	100 247° 10.5 KTS

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
 WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955

12-5-63

DATE Tues. 8 Sept. 1964

TIME	LAT	LONG	FRES WEA	VIS	SIP	DRY P	DEW PT	HUM%	TH SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	14-05 N	169-17 W	Ptly Clby	15	1012	81	73	79	4	1	090-5-4	82	12	080	722 10.5 kn
0200	14-03 N	169-22 W	" "	15	1011	81	73	79	4	1	090-5-4	82	12	080	722 10.5 kn
0300	13-53 N	169-30 W	" "	15	1011	81	73	79	1	0	090-5-4	82	10	080	222 10 kn
0400	13-45 N	169-37 W	" "	15	1011	81	73	79	1	0	090-5-4	82	10	080	222 10 kn
0500	13-37 N	169-45 W	" "	5	1011	82	77	84	1	0	090-5-4	82	12	357	222 10 kn
0600	13-24 N	169-52 W	" "	21	1011	82	77	84	1	0	090-5-4	82	12	357	222 10 kn
0700	13-25 N	170-00 W	" "	24	1012	82	74	74	1	0	090-5-4	82	12	090	222 10 kn
0800	13-17 N	170-06 W	" "	26	1012	82	74	74	1	0	090-5-4	72	12	090	222 10 kn
0900	13-22 N	170-06 W	" "	20	1013	82	74	74	2	2	090-5-4	72	10	090	222 - 10 R 55
1000	13-07 N	170-13 W	Cloudy	20	1011	81	76	89	2	1	090-5-4	82	10	090	222 10 kn
1100	12-59 N	170-19 W	" "	12	1013	85	76	69	2	1	090-5-4	32	10	090	222 10 kn
1200	12-51 N	170-27 W	Partly Clby	10	1013	78	77	76	10	10	090-5-4	82	15	090	222 10 kn
1300	12-38 N	170-46 W	" "	10	1012	82	75	80	5	3	090-5-4	82	10	080	222 10 kn
1400	12-31 N	170-48 W	Ptly Clby	15	1012	83	75	80	5	3	090-5-4	82	8	080	222 10 kn
1500	12-23 N	170-55 W	" "	22	1011	82	75	80	3	1	135-2-4	82	2	080	222 10 kn
1600	12-16 N	171-02 W	" "	20	1011	82	75	80	3	1	135-2-4	83	8	090	977 10.5
1700	12-09 N	171-10 W	" "	02	1011	82	77	94	6	1	135-2-4	93	3	090	222 10.5
1800	12-03 N	171-08 W	" "	22	1011	83	76	16	6	1	080-2-4	83	12	060	314 10.5
1900	12-13 N	171-02 W	" "	15	1011	82	77	89	5	1	080-2-4	83	10	060	314 10.5
2000	12-21 N	171-03 W	" "	7	1012	81	78	79	3	2	080-5-4	73	10	070	314 11
2100	12-30 N	171-04 W	Fecl Clby	15	1012	81	77	79	3	2	080-5-4	73	10	070	314 11
2200	12-38 N	171-05 W	" "	11	1012	81	77	72	3	2	080-5-5	73	10	070	314 11
2300	12-46 N	171-06 W	" "	11	1012	81	74	72	3	2	080-5-5	83	10	070	048 10
2400	12-52 N	171-09 W	" "	15	1012	81	74	79	3	2	080-5-5	83	10	070	048 10

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955

12-5-63

DATE Wednesday 9 Sept. 1961

TIME	LAT	LONG	FRES WEA	VIS	SLP	DRY B	DEW PT	HUM% C	TR SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	13-59N	171-45W	Ptly/Cloudy	10	1011	82	76	27	3	2	080-55	83	7	290	048 10
0200	13-06N	171-25W	11	7	1010	82	77	31	1	2	080-54	83	5	280	048 10
0300	13-13N	171-18W	11	11	5	1009	80	77	31	3	080-54	83	5	270	048 10
0400	13-20N	171-04W	11	11	10	1008	80	76	23	3	080-54	83	5	270	048 10
0500	13-27N	171-04W	11	5	1016	79	72	27	1	270-51	83	4	260	048 10	
0600	13-33N	170-50W	11	5	1012	76	72	27	2	270-51	84	13	110	245 10	
0700	13-39N	170-55W	11	15	1012	76	72	31	3	090-54	84	4	150	048 10	
0800	13-44N	170-48W	11	15	1011	83	72	27	2	090-53	83	4	150	048 10	
0900	13-50N	170-43W	11	15	1012	82	72	27	3	090-53	83	4	150	048 10	
1000	13-58N	170-37W	Cloudy	10	1012	82	77	27	3	090-53	83	10	090	048 10	
1100	14-05N	170-30W	11	11	1012	87	72	27	2	090-53	83	10	090	048 10	
1200	14-12N	170-23W	11	11	1012	87	71	26	2	090-53	83	10	090	048 10	
1300	14-18N	170-16W	Cloudy	11	1012	79	71	26	3	090-53	83	10	090	048 10	
1400	14-24N	170-10W	Cloudy	11	1011	84	76	26	5	090-52	83	10	090	048 10	
1500	14-30N	170-03W	Cloudy	11	1010	84	76	26	4	090-52	83	10	090	048 10	
1600	14-36N	169-58W	11	11	1010	84	76	26	5	090-52	83	10	090	048 10	
1700	14-42N	169-47W	Cloudy	11	1010	84	76	26	4	090-52	83	10	090	048 10	
1800	14-47N	169-40W	11	11	1010	82	77	27	3	090-52	83	10	090	048 10	
1900	14-54N	169-32W	11	11	1010	82	77	27	3	090-52	83	8	110	048 10	
2000	15-03N	169-22W	Cloudy	10	1012	82	74	72	7	4	090-52	83	10	090	048 10
2100	15-10N	169-29W	Cloudy	9	1013	72	72	76	0	0	090-52	73	10	090	310-10
2200	15-18N	169-38W	Cloudy	9	1013	72	72	76	0	0	090-52	73	10	090	310-11 KTS
2300	15-25N	169-46W	Cloudy	9	1013	72	72	76	2	0	090-52	73	10	090	310-11
2400	15-33N	169-53W	Cloudy	9	1013	72	76	76	0	0	090-52	73	10	090	310-11 KTS
	15-36N	170-03W	Cloudy	7	1013	72	79	76	0	0	090-52	73	10	090	310-11 KTS
REMARKS: <i>Cloudy</i>															

ALL TIMES LOCAL (WHISKER); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955
12-5-63

DATE Thurs. 13 Sept. 1967

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY R	DEW PT	HUM% O	TR SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	15-28N	170-11W	1014.645	12	1012	81	74	82	2	0	092-5-6	82	15	080	222 10.5
0200	15-20N	170-18W	* n -	10	1012	80	74	83	4	2	090-5-6	82	17	070	222 10.5
0300	15-12N	170-25W	* n -	10	1011	82	74	83	3	1	092-5-6	82	17	080	222 10.5
0400	15-06N	170-33W	* n -	10	1011	80	74	83	3	2	080-5-6	82	17	080	222 10.5
0500	14-58N	170-42W	-	05	1010	82	77	91	4	2	010-5-6	82	18	070	233 10.5
0600	14-49N	170-52W	-	10	1011	82	77	84	4	1	090-5-6	82	18	070	233 10.5
0700	14-48N	170-54W	1	15	1011	72	71	84	4	1	190-5-6	82	18	070	223 10.5
0800	14-40N	171-01W	1	15	1011	83	76	80	9	1	090-5-6	23	18	070	223 10.5
0900	14-32N	171-05W	11	15	1012	83	76	82	6	6	090-5-6	83	20	090	225 10.5
1000	14-25N	171-12W	11	15	1012	85	76	73	6	8	090-5-6	23	20	090	225 10.5
1100	14-15N	171-20W	11	15	1012	85	76	73	6	6	090-5-6	83	20	090	225 10.5
1200	14-08N	171-28W	1	15	1012	85	76	73	6	6	080-5-6	23	20	090	225 10.5
1300	14-03N	171-38W	1	15	1011	85	76	73	6	5	090-5-6	22	22	090	230 10.5
1400	13-56N	171-41W	11	15	1010	85	76	73	6	5	012-5-6	82	20	090	225 10.5
1500	13-48N	171-56W	11	15	1012	85	76	73	6	5	090-0-8	82	20	080	225 10.5
1600	13-41N	172-03W	11	15	1009	85	76	75	6	5	050-0-8	81	23	080	225 10.5
1700	13-33N	172-11W	11	15	1009	84	76	76	6	4	010-6-8	81	18	070	235 10.5
1800	13-25N	172-19W	11	15	1009	84	76	76	6	4	010-6-8	82	18	080	252 10.5
1900	13-18N	172-27W	11	15	1009	82	71	83	6	4	070-6-8	82	18	080	315 10.5
2000	13-12N	172-35W	1	15	1009	82	72	79	6	4	090-6-8	82	18	080	315 10.5
2100	13-32N	172-42W	clear	15	1010	82	72	79	0	0	070-6-8	82	22	070	315 10.5
2200	13-40N	172-51W	clear	20	1012	82	72	79	0	0	070-6-8	82	22	070	315 10.5
2300	13-47N	172-59W	clear	20	1012	82	72	79	0	0	010-6-8	82	22	070	315 10.5
2400	13-56N	173-01W	clear	20	1012	82	72	79	0	0	070-6-8	82	22	070	315 10.5

REMARKS:

f w/squalls

^{1 MAY}
ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955
12-5-63

DATE

11 Sept. 1964

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY F	DEW PT	HUMD%	TH SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	14-04 N	172-53 W	1014 Cdr	10	1012	82	77	84	4	2	090-6-8	82	17	080	048 9.5 Kts
0200	14-10 N	172-47 W	" "	10	1011	82	77	84	2	0	090-6-8	82	17	080	048 9 Kts
0300	14-16 N	172-40 W	" "	10	1011	82	77	84	2	0	090-6-8	82	17	080	048 9 Kts
0400	14-23 N	172-37 W	" "	10	1011	82	77	84	3	0	090-6-8	82	17	080	048 9 Kts
0500	14-29 N	172-37 W	" "	5	1011	82	77	84	2	0	090-6-8	82	18	080	048 9
0600	14-34 N	172-31 W	" "	8	1011	82	77	84	3	2	090-6-8	82	18	080	048 9 Kts
0700	14-35 N	172-27 W	" "	10	1012	82	77	84	4	2	090-6-8	82	18	080	048 9 Kts
0800	14-38 N	172-21 W	" "	15	1012	82	77	84	4	2	090-6-8	82	18	080	048 9 Kts
0900	14-45 N	172-06 W	" "	15	1013	84	76	76	5	4	080-6-8	82	25	080	045 9 Kts
1000	14-52 N	171-57 W	" "	10	1014	84	76	76	2	4	080-6-8	82	25	080	045 9 Kts
1100	14-59 N	171-50 W	" "	15	1014	84	76	76	7	4	080-6-8	82	20	080	045 9 Kts
1200	15-05 N	171-47 W	" "	15	1014	84	76	76	4	4	080-6-8	82	20	080	045 9 Kts
1300	15-11 N	171-39 W	" "	15	1012	82	77	84	6	2	080-6-8	82	20	080	045 8.5
1400	15-17 N	171-33 W	" "	15	1011	82	77	84	8	1	080-6-8	82	20	070	045 8.5
1500	15-23 N	171-27 W	" "	15	1011	82	77	84	6	1	080-6-8	82	20	070	045 8.5
1600	15-30 N	171-21 W	" "	15	1011	82	77	84	6	1	080-6-8	82	20	080	045 8.5
1700	15-31 N	171-15 W	" "	15	1011	82	77	84	6	1	080-6-8	82	17	120	045 8.5
1800	15-43 N	171-09 W	" "	10	1011	82	77	84	6	1	080-6-8	82	17	120	045 8.5
1900	15-50 N	171-02 W	" "	8	1011	82	77	84	6	1	080-6-8	82	17	120	045 8.5
2000	15-56 N	170-55 W	" "	7	1011	82	77	84	6	1	080-6-8	82	17	120	045 8.5 Kts
2100	16-02 N	170-53 W	T-FW 1000 15	15	1012	82	77	84	4	3	080-6-8	82	15	080	045 8.6
2200	16-09 N	170-47 W	" "	15	1014	82	77	84	4	3	080-6-8	82	15	080	045 8.6
2300	16-15 N	170-40 W	" "	15	1014	82	77	84	4	3	080-6-8	82	15	080	045 8.6
2400	16-23 N	170-39 W	" "	15	1014	82	77	84	4	3	080-6-8	82	15	080	045 10.0 Kts

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
 WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955
 12-5-63

DATE 12 Sept. 1964

TIME	LAT	LONG	PRES	WEA	VIS	SLP	DRY F	DEW PT	WIND/C	TH SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	16-30 N	170-57 W	1014	dry	15	1012	80	24	83	3	1	080-6-8	82	17	085	314 11 km
0200	16-36 N	171-05 W	1012	"	15	1012	81	23	29	3	1	081-6-8	82	16	080	314 11 km
0300	16-43 N	170-12 W	1014	"	15	1012	81	24	53	3	1	081-6-8	82	16	080	314 11 km
0400	"	"	1012	"	15	1012	80	24	83	3	1	080-6-8	82	16	080	314 11 km
0500	16-35 N	17-28 W	1014	"	15	1014	82	27	84	4	2	082-6-8	82	16	080	272 10.5 km
0600	16-38 N	171-54 W	1014	"	15	1014	82	27	64	4	2	080-6-8	82	16	080	272 10.5 km
0700	16-45 N	171-45 W	1014	"	15	1012	82	27	51	4	2	080-6-8	82	16	080	272 10.5 km
0800	16-40 N	171-52 W	1014	"	15	1014	82	27	84	4	2	080-6-8	82	16	080	272 10.5 km
0900	16-37 N	171-55 W	1014	"	15	1014	82	27	64	4	1	080-6-8	82	16	080	272 10.5 km
1000	16-06 N	172-03 W	1014	"	15	1012	82	27	73	4	3	090-6-7	82	15	090	222 10.5
1100	15-39 N	172-11 W	1014	"	15	1012	80	27	73	4	3	090-6-7	82	15	090	222 10.5
1200	15-51 N	172-20 W	1014	"	15	1012	84	27	73	4	3	090-6-7	82	15	090	222 10.5
1300	15-48 N	172-22 W	1014	"	15	1012	83	27	73	4	2	090-6-7	82	15	090	222 10.5
1400	15-43 N	172-29 W	1014	"	15	1012	83	26	76	4	1	090-6-8	82	15	080	222 10.5
1500	15-33 N	172-38 W	1014	"	15	1012	83	26	76	3	2	090-6-7	82	15	080	222 10.5
1600	15-26 N	172-45 W	1014	"	15	1012	83	26	76	1	2	090-6-7	82	15	080	222 10.5
1700	15-19 N	172-54 W	1014	"	15	1012	83	26	76	5	2	090-6-7	82	15	080	222 10.5
1800	15-11 N	173-01 W	1014	"	15	1012	83	26	76	5	1	190-6-7	82	15	080	222 10.5
1900	15-04 N	173-09 W	1014	"	15	1012	83	26	76	5	1	090-6-6	82	14	080	222 10.5
2000	14-54 N	173-17 W	1014	"	15	1012	83	26	74	5	1	090-6-6	82	14	080	222 10.5
2100	14-47 N	173-26 W	1014	"	15	1012	82	27	74	5	1	090-6-6	82	14	080	222 10.5
2200	14-40 N	173-33 W	1014	"	15	1012	82	27	84	2	2	090-6-7	82	16	080	222 10.5
2300	14-33 N	173-40 W	1014	"	15	1012	82	27	84	2	2	090-6-7	82	16	080	222 10.5
2400	14-26 N	173-49 W	1014	"	15	1012	82	27	84	2	2	090-6-7	82	16	080	222 10.5
REMARKS:																

YR/H

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955

12-5-63

DATE 13 Sept. 1964

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM%	TR SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	14-48N	173-55W	1014 1014	15	1013	82	74	83	2	1	090-6-8	82	17	280	314 10.5 Kts
0200	14-55N	174-01W	" "	15	1012	82	75	82	1	0	090-6-8	82	17	280	314 10.5 Kts
0300	15-02N	174-09W	" "	15	1012	82	75	80	1	0	090-6-8	82	17	280	314 10.5 Kts
0400	15-10N	174-10W	" "	15	1012	82	75	80	1	0	090-6-8	82	17	280	314 10.5 Kts
0500	15-17N	174-03W	" "	8	1012	82	74	76	2	0	090-6-8	82	17	080	048 10 K
0600	15-27N	173-59W	" "	8	1012	82	74	76	2	0	090-6-8	82	16	080	048 10 K
0700	15-34N	173-57W	" "	10	1012	82	74	76	2	0	090-6-8	82	16	080	048 10 K
0800	15-25N	173-47W	" "	15	1012	82	74	76	2	0	090-6-8	82	15	080	048 10 K
0900	15-40N	173-33W	" "	15	1012	82	74	76	2	0	090-6-8	82	15	080	048 10 K
1000	15-46N	173-36W	" "	15	1012	82	74	80	2	2	090-6-8	82	15	080	045 10 K
1100	15-53N	173-20W	" "	15	1012	82	74	80	2	2	090-6-8	82	15	080	045 10 K
1200	16-00N	173-13W	" "	15	1012	82	74	80	3	2	090-6-8	82	15	080	045 10 K
1300	16-08N	173-09W	" "	15	1012	82	74	80	3	2	090-6-8	82	15	080	045 10 K
1400	16-11N	173-02W	" "	15	1012	82	74	80	3	2	090-6-8	82	15	080	045 10 K
1500	16-18N	172-55W	" "	15	1012	82	74	80	4	1	090-6-8	82	13	085	045 10 K
1600	16-25N	172-42W	" "	15	1012	82	74	80	5	2	090-6-8	82	13	080	045 10 K
1700	16-26N	172-48W	" "	15	1012	82	74	76	4	2	090-6-8	82	13	090	045 10 K
1800	16-33N	172-41W	" "	10	1012	82	74	76	4	2	090-6-8	82	13	090	045 10 K
1900	16-40N	172-34W	" "	5	1012	82	74	76	4	2	090-6-8	82	13	090	045 10 K
2000	16-47N	172-37W	" "	5	1012	82	74	76	4	2	090-6-8	82	15	090	045 10 K
2100	16-53N	172-26W	Cloudy	10	1012	82	74	76	4	2	090-6-8	82	15	090	045 10 K
2200	17-00N	172-19W	Cloudy	10	1012	82	74	76	4	2	090-6-8	82	15	090	045 10 Kts
2300	17-06N	172-12W	Cloudy	10	1012	82	74	76	4	2	090-6-8	82	15	090	045 10 Kts
2400	17-12N	172-06W	Cloudy	10	1012	82	74	76	4	2	090-6-8	82	17	090	045 10 Kts
REMARKS:															

XRAY

ALL TIMES LOCAL (WHEATON); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955
12-5-63

DATE 14 Sept. 1964

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY F	DEW PT	HUMO/°C	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	17-16 N	172-04 W	Cloudy	10	1014	80	72	28	9	9	090-6-5	82	15	130	045 S 60
0200	17-22 N	171-58 W	" "	12	1014	80	73	29	9	8	090-6-8	82	15	090	003 10 K
0300	17-31 N	171-58 W	" "	12	1014	80	73	79	8	7	090-6-8	82	15	090	003 10 K
0400	17-41 N	171-52 W	" "	12	1013	81	73	22	8	7	090-6-8	82	16	090	003 10 K
0500	17-51 N	171-57 W	" "	8	1014	80	72	15	8	1	090-6-7	52	16	090	003 10 K
0600	18-00 N	171-46 W	" "	10	1014	81	74	74	8	7	090-6-8	62	16	090	003 10 K
0700	18-04	171-48 W	" "	16	1014	81	74	72	8	7	090-6-8	82	16	090	001 10
0800	18-22 N	171-48 W	" "	20	1016	81	74	79	8	7	090-6-7	82	15	090	003 9.5
0900	18-20	171-59 W	"	22	1016	82	74	79	8	7	090-6-7	82	15	090	003 9.5
1000	18-30	171-58 W	"	20	1016	83	76	80	8	7	090-6-7	82	15	090	003 9.5
1100	18-39	171-58 W	"	20	1016	83	76	80	8	7	090-6-7	82	15	090	003 9.5
1200	18-49	171-58 W	"	20	1016	83	76	80	8	7	090-6-7	82	15	090	003 9.5
1300	19-00 N	171-58 W	0'cast	20	1015	82	74	76	9	7	090-6-7	82	16	100	003 12 K
1400	19-08 N	171-57 W	"	20	1015	82	74	76	9	8	090-6-7	82	16	100	003 12 K
1500	19-18 N	171-57 W	"	20	1015	82	74	76	9	8	090-6-7	82	16	100	003 12 K
1600	19-28 N	171-57 W	"	15	1015	82	74	76	9	8	090-6-7	82	16	100	003 12 K
1700	19-39 N	171-57 W	Cloudy	15	1015	72	75	80	8	7	090-6-7	82	15	100	003 10
1800	19-49 N	171-57 W	"	10	1015	82	75	70	8	7	090-6-7	72	14	100	003 10
1900	20-00 N	171-56 W	"	8	1015	82	75	80	8	7	090-6-7	82	15	100	003 10
2000	20-07 N	171-55 W	"	8	1015	82	75	80	5	7	090-6-7	12	15	100	003 10
2100	20-19	171-56 W	Few Cld	15	1013	81	73	75	3	2	090-6-6	82	15	090	003 10 R
2200	20-30	171-56 W	"	15	1015	81	73	75	3	2	090-6-6	82	15	090	003 10 R
2300	20-40	171-55 W	"	16	1016	81	73	75	3	2	090-6-6	82	15	090	003 10 R
2400	20-51	171-55 W	"	15	1016	81	73	75	3	2	090-6-6	82	15	090	003 10 R

REMARKS:

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ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955
12-5-63

DATE 15 Sept. 1964

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUMO/°C	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	21° 00' N	171° 55' W	1018 Cldy	15	1012	80	74	79	3	2	090-6-7	82	17	090	003 10 k
0200	21° 10' N	171° 55' W	" "	15	1017	82	74	79	7	6	090-6-7	82	17	090	003 10 k
0300	21° 20' N	171° 55' W	" "	15	1017	80	74	79	2	0	090-6-7	82	17	090	003 10 k
0400	21° 30' N	171° 55' W	" "	15	1017	80	74	79	2	0	090-6-7	82	17	090	003 10 k
0500	21° 40' N	171° 55' W	" "	8	1017	83	74	84	3	0	090-6-7	82	16	090	003 10 k
0600	21° 50' N	171° 55' W	" "	14	1018	72	74	76	3	0	090-6-7	82	16	090	003 10 k
0700	22° 00' N	171° 55' W	" "	12	1018	73	74	76	2	0	090-6-7	82	16	090	003 10 k
0800	22° 10' N	171° 59' W	" "	15	1018	82	74	76	3	0	090-6-7	82	16	090	003 10 k
0900	22° 18' N	171° 53' W	" "	20	1018	82	74	76	3	2	090-6-7	82	18	090	003 10 k
1000	22° 28' N	171° 53' W	" "	20	1019	82	74	76	3	2	090-6-7	82	18	090	003 10 k
1100	22° 37' N	171° 52' W	" "	20	1019	82	74	76	3	2	090-6-7	82	18	090	003 10 k
1200	22° 47' N	171° 52' W	" "	20	1019	82	74	76	3	2	090-6-7	82	18	090	003 10 k
1300	22° 57' N	171° 52' W	" "	20	1018	82	74	76	8	6	090-6-7	82	18	100	001 10 k
1400	23° 03' N	171° 52' W	" "	20	1018	80	73	79	7	5	090-6-1	82	15	090	001 10 k
1500	23° 12' N	171° 52' W	" "	20	1018	80	73	79	8	7	090-6-7	82	15	090	001 10 k
1600	23° 22' N	171° 52' W	" "	20	1018	80	73	79	8	6	090-6-7	82	15	090	001 10 k
1700	23° 33' N	171° 51' W	" "	20	1018	80	74	81	8	6	090-6-7	81	16	090	001 10 k
1800	23° 43' N	171° 50' W	" "	12	1019	80	74	73	9	3	090-6-7	81	16	090	001 10 k
1900	23° 53' N	171° 50' W	" "	8	1019	70	73	79	9	1	090-6-7	81	16	090	001 10 k
2000	23° 03' N	171° 50' W	" "	8	1019	70	73	79	9	1	090-6-7	81	16	090	001 10 k
2100	24° 10' N	171° 51' W	Cldy	15	1019	80	73	79	9	2	090-6-7	81	15	090	001 10 k
2200	24° 20' N	171° 51' W	" "	13	1020	80	73	79	8	7	090-6-7	81	15	090	001 10 k
2300	24° 30' N	171° 50' W	" "	15	1020	80	73	79	8	7	090-6-7	81	15	090	001 10 k
2400	24° 40' N	171° 50' W	" "	15	1020	80	73	79	8	7	090-6-7	81	15	090	001 10 k

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

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DATE

16 Sept. 1954

NO OBSERVATIONS MADE THIS DAY - NO Fi.

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY PT	DEW PT	HUM% O	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	24-50N	171-50W	Cloudy	12	1020	80	73	77	8	7	090-6-7	80	12	090	001 10kn
0200	25-00N	171-50W	" "	7	1020	78	73	83	7	8	090-6-7	80	12	090	001 10kn
0300	25-10N	171-50W	" "	12	1020	75	72	83	7	8	090-6-7	80	12	090	001 10kn
0400	25-20N	171-49W	Cloudy	12	1020	78	72	83	7	8	090-6-7	80	12	110	001 10kn
0500	25-30N	171-49W	"	8	1020	78	72	83	7	8	090-6-7	80	12	160	000 16kn
0600	25-40N	171-49W	"	10											
0700			ANCHORED	11											
0800															
0900															
1000															
1100															
1200															
1300															
1400															
1500															
1600															
1700															
1800															
1900															
2000															
2100															
2200															
2300															
2400															
REMARKS:															

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
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